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Consumer Evaluation of Product-Related Injuries: The Development and Empirical Testing of a Behavioral Model of the Product Liability Process.

Bryce Mitchell Griffin
Louisiana State University and Agricultural & Mechanical College

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Consumer evaluation of product-related injuries: The development and empirical testing of a behavioral model of the product liability process

Griffin, Bryce Mitchell, Ph.D.

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300 N. Zeeb Rd.
Ann Arbor, MI 48106

CONSUMER EVALUATION OF PRODUCT-RELATED INJURIES: THE DEVELOPMENT AND EMPIRICAL TESTING OF A BEHAVIORAL MODEL OF THE PRODUCT LIABILITY PROCESS

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by
Bryce Mitchell Griffin
B.S., Southern Illinois University at Edwardsville, 1983
M.B.A., Southern Illinois University st Edwardsville, 1984
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ABSTRACT

This study strives to provide a better understanding of consumer evaluation of product liability cases. A model of consumer perceptions of the liability process, based predominantly on attribution theory, is developed and tested. The research first develops a general attributional model of the liability process, identifies relevant managerially-controllable dimensions of liability cases, and then tests consumer reaction to these factors utilizing experimental scenarios. The influence of several consumer-juror individual difference variables on the evaluation of liability cases is examined. In addition, potential mediators of the product liability process, including assessment of responsibility and affective evaluation of the plaintiff and defendant, are investigated.

The research hypotheses are tested on a sample of 384 adults from a major southeastern metropolitan area. The sample very closely matches that of the populations across a variety of demographic characteristics. The results of the study tend to support the proposed attributional model of the liability process and the research hypotheses developed from the model. Thirty-three of the fifty-eight research hypotheses are supported by the analysis of the research data. The supported hypotheses provide evidence that both factors controllable by marketing managers and individual difference characteristics of consumer-jurors impact the assessment of product-related injuries. At the same time, the study offers support for the theoretical structure of the

attributional process proposed by Kelley and Michela (1980), refined by Weiner (1985), and further developed in the current study.

This research makes a contribution from both a managerial and theoretical perspective. The study combines the marketing and legal disciplines, and compliments and extends areas of psychological research. Marketing managers will directly benefit from increased knowledge of consumer reaction to the manipulation of marketing mix variables. Likewise, liability attorneys will gain insight into the effect of individual differences among jurors in liability cases. Finally, an important theory is extended by testing under extreme conditions. Implications for theory development, marketing management, and public policy are provided.

CHAPTER ONE

INTRODUCTION TO THE RESEARCH TOPIC

Introduction

Product liability litigation has become a rapidly escalating cost of conducting business (Settle and Spigelmyer 1984). The past two decades have seen startling increases in both the number of product liability cases and the average liability award (Jury Verdict Research 1988). Furthermore, recent developments such as *market share liability* (Sheffet 1983) and *deep pocket* awards (see *Moning v. Alfono* 1977) serve to increase the accountability of all members of the marketing channel (Adams and Bennett-Alexander 1985). However, the marketing academic community has devoted only minor attention to this significant managerial and public policy dilemma.

This study strives to provide a better understanding of consumer evaluation of product liability cases. An attribution-based model of consumer perceptions of the liability process is developed and tested. The research focuses on developing a general attributional model of the liability process, identifying relevant managerially-controllable dimensions of liability cases, and then testing consumer reaction to these factors utilizing experimental scenarios. The influence of several consumer-juror individual difference variables on the evaluation of liability cases is examined. In addition, potential mediators of the product liability process, including assessment of responsibility and affective evaluation of the plaintiff and defendant, are investigated.

Chapter One provides an overview of the research topic. The importance of recent trends in liability litigation to the marketing practitioner is discussed, followed by the impact of product liability on the consumer and society at large. Next, research objectives will be delineated, along with a general model of the liability process. Following discussion of the model, anticipated contributions and

limitations of the present research will be discussed. Chapter One concludes with an outline of the remainder of the study.

Overview of the Topic

Product liability litigation can be traced back to thirteenth century English criminal statutes forbidding the sale of "corrupt food or drink" (Dickerson 1951, p. 20). Early liability lawsuits were brought under a pro-plaintiff legal doctrine, trespass. Under trespass, a plaintiff had only to establish an injury occurred as a result of the defendant's actions to insure recovery (Spacone 1985). Proof of product defect or negligent action of the defendant were not required. Around 1850, negligence emerged as the dominant legal doctrine for liability litigation. Legal scholars (Levy 1957; Friedman 1973) contend negligence was established to protect the rapidly developing industrial economy. Therefore negligence is a more defendant-oriented philosophy, requiring the plaintiff prove a violation of the manufacturer's duty to exercise ordinary care in the design, production, distribution and promotion of the product. In other words, the plaintiff has the burden of establishing not only the presence of a defect, but that the defect arose from "unreasonable conduct" on the part of the defendant (Morgan 1982). Today, strict liability is the predominant legal doctrine for product liability litigation (Spacone 1985). Strict liability reestablished a very consumer-oriented legal environment, eliminating the plaintiff's burden of establishing defendant negligence. Thus, in the course of several hundred years, we have essentially witnessed a full circle in the evolution of product liability laws.

While product liability has undergone considerable change over several centuries, the past few decades have witnessed unprecedented escalation in liability litigation. A major study of product liability, the Interagency Task Force on Products Liability (1977), examined court decisions for the period 1965 through 1976. The task force reported

that both the annual number of product liability cases, as well as the average damage award, doubled during this period. More recent studies indicate an even more rapidly escalating trend. For example, from 1976 to 1985, the number of product liability lawsuits increased over 700%, while the number of million dollar settlements increased by a factor of 18 (Greene 1986). The trend continued in the 1980s, when average jury awards for liability suits increased from $225,000 in 1980 to $678,826 in 1986 (Jury Verdict Research 1988). Unfortunately, there is no end in sight to this rapidly rising cost of conducting business.

The impact of product liability costs on some industries has been devastating. For instance, the production of light aircraft has been sharply curtailed, from 17,811 units in 1978 to 2,438 in 1984 (North 1985) and continues to fall. This rapid decrease has been directly attributed to the reported $60,000 to $100,000 per unit liability insurance expense (Gatty 1987). Russ Meyer, chairman of Cessna Aircraft Company, commented on the product liability dilemma facing the general aviation industry:

> In less than 14 years, product liability has practically destroyed a major segment of our industry. It would be fair to say that new light single-engine aircraft have become almost extinct. I can tell you without equivocation that the sole reason Cessna suspended production of piston aircraft indefinitely was the cost of product liability. I can say with similar candor that Cessna will not build another piston aircraft unless we can somehow reduce the horrendous ongoing cost of product liability. (Douglas 1989, p. 1)

Many other industries, including pharmaceutical and cosmetic producers and distributors (Friend 1990), health care providers (consider the plight of OB/GYN physicians), and even volunteer coaches of children's sports teams (Mihoces 1990) have been equally hard hit by the liability crisis. With few exceptions, marketers in the 90s must be better aware of the costs and consequences of product liability litigation to secure a competitive position.

Despite the apparent importance of product liability in today's marketplace, only limited academic research on this topic has appeared

in the marketing literature. The majority of these articles are nonempirical, focusing on relating judicial interpretations of court cases and recent developments in legal doctrine to the needs of the marketing discipline (e.g. Rados 1969; Jensen, Mazze, and Stern 1973; Loudenback and Goebel 1974; Morgan 1979, 1982, 1986, 1987, 1988a, 1988b; Downs and Behrman 1986). In essence, these manuscripts provide the reader with a "managerial primer" on product liability. These articles serve to increase awareness of potential problems and provide a foundation for empirical research into the impact of product liability on the marketing discipline.

Other studies have proposed behavioral models and empirically investigated the role of different players in the litigation process (Busch 1976; Busch and Hair 1980; Mowen 1983). This approach assesses the differing perspectives and attitudes of jurors and judges, plaintiffs and defendants, and producers and consumers regarding product liability claims. By better understanding the attitudes of these parties, it is believed more effective managerial strategies can be established. This is the perspective taken in the present study. More specifically, the factors influencing consumer reaction to liability cases will be identified and their impact on attitude toward the defendant firm will be assessed. We believe such information will be beneficial to both marketing mangers and public policy makers.

Importance to Marketing Management

We have provided some figures illustrating the increasing number and size of product liability awards. These soaring numbers indicate the magnitude of the liability crisis to the marketing discipline and business community as a whole. Nearly twenty years age Loudenback and Goebel (1974, p. 62) foresaw "that marketing is at the threshold of another momentous change" due to coming changes in liability legislation. A more immediate concern, however, is how does liability

legislation and the ensuing awards affect the strategic and tactical decisions of the marketing manager? Several related areas can be pointed out which hold considerable relevance for the marketing practitioner.

Deep Pocket Awards

At a general level, the emergence of *deep pocket* awards, where an injured party sues several defendants in an effort to secure compensation from at least one, has increased the liability exposure of all members of the marketing chain. For over a century, privity of contract was a cornerstone of liability law. Privity limited liability claims to only those parties which entered into a direct contractual relationship. Thus a consumer injured due to a manufacturer's defective product could not bring suit against the producer if the product was purchased from an intermediary. Similarly, if the retailer was not responsible for the defect, neither could suit be brought against the retailer. In essence, the marketing channel provided insulation against liability litigation. In 1916 however, a landmark court decision (*MacPherson v. Buick Motor Company*) signalled the beginning of the end of privity.

With the requirement of privity out of the way, the doors were opened for deep pocket awards. A plaintiff is now free to bring suit against any (and all) parties s/he perceives as responsible. As an illustration, consider legal action arising from the crash of a commercial airliner. One can expect the pilot, the airline company, the manufacturer of the aircraft, and suppliers of any potentially defective components to all be named as defendants in an ensuing lawsuit. One of the earliest examples of a court holding multiple members of the marketing channel liable is *Moning v. Alfono* (1977). In this case, the manufacturer, wholesaler, and retailer of a child's slingshot were each found liable, even though the product was considered neither defective

nor inherently dangerous. Such deep pocket suits are the basis for marketing liability and drastically increase the accountability of every marketing channel member.

Increased Cost of Goods and Services

The most obvious impact of increased liability litigation is the direct cost of providing litigation defense and covering liability awards and insurance premiums. Even successful defense of liability claims are costly. Robert Martin, chief litigation counsel for Beech Aircraft Corporation, stated "Beech has spent more than $2 million defending a single case to a successful conclusion. But when you take them all and average it out, the cost of defending a case is $500,000. That cost keeps going up." ("The Defense..." 1989, p. 161). In testimony before the Senate Commerce Committee in 1984, a manufacturer of components (brakes) for the automotive industry claimed it was the cost of legal defense, rather than awards to injured parties, that were most damaging. The firm claimed that of the $850,000 paid out in liability expenses the previous year, about $700,000 (or 82%) covered attorney fees and transaction expenses (Settle and Spigelmyer 1984). Considering a Rand Corporation study reporting that nearly $2 goes to legal expenses for every $1 to the plaintiff in liability cases (Settle and Spigelmyer 1984) and a *Fortune* ("New Life..." 1983) editorial estimating over 40% of every award dollar goes toward legal fees, this is a believable claim.

The skyrocketing costs of medical care can largely be attributed to rising malpractice awards. According to the most recent *The Lawyer's Almanac* ("Jury Verdicts" 1989), the mean medical malpractice award has increased from $404,726 in 1980 to $1,478,028 in 1986, an increase of 265% in just six years. While significant, medical malpractice is only one of many possible examples of products and services subject to substantial liability awards. In addition, sharp increases in legal

expenses and liability awards have been matched by corresponding increases in product liability and medical malpractice insurance premiums. Clearly, liability-related expenses represent a substantial cost that cannot be ignored by the business community.

Research and Development/Technological Innovation

Intuitively it may seem that increased accountability for product-related injuries would encourage manufacturers and marketers to improve their current offering and develop new and safer products. Certainly the development of a perfectly safe product, incapable of inflicting injury, would lessen the degree of liability exposure. In many situations, however, the opposite has occurred. Under the doctrine of strict liability, a manufacturer can be held liable regardless of any safeguards taken. Thus strict liability may actually reduce the manufacturer's incentive to develop new safety features (Loudenback and Goebel 1974). Furthermore, improvements in a product are commonly used in subsequent lawsuits as evidence that the original form of the good was unsafe or defective (Settle and Spigelmyer 1984). According to Beech Aircraft Corporation's Robert Martin, "The threat of product liability has had very little to do with the safety of airplanes. It might even have a negative effect by keeping new ideas, improvements, new products off the market" ("The Defense..." 1989, p. 162), Therefore, it is safe to say that technological improvements may actually be restricted since they can increase a firm's exposure to liability suits.

International Marketing

Competing in the international marketplace is a necessity for most domestic producers and the United States economy as a whole. Although many factors influence the ability to compete internationally, the importance of differing liability environments should not be ignored.

For example, it has been reported that liability insurance premiums for European and Japanese producers and marketers run from 20 to 100 percent less than comparable U.S. firms (Settle and Spigelmyer 1984). Such expenses must ultimately be passed along to the consumer, further eroding our nation's competitiveness on the international scene.

Reluctance to introduce "cutting edge" technology is also a handicap in international marketing. Malott (1983) observed that U.S. firms are often more hesitant than foreign producers to incorporate the latest innovations for fear of legal repercussions. Therefore, domestic producers are placed at a competitive disadvantage in international business.

Distribution Channels

Deep pocket awards have increased the liability exposure of all members of the marketing channel. As a consequence, wholesalers tend to be more selective in determining which goods to distribute. Liebermann (1984) claims distributors are simply not willing to accept the risk associated with innovative or inherently dangerous products. Failure to accept the risks forces firms into vertical integration to reach their markets. These shorter and tighter channels of distribution are often less efficient due to reduced specialization, resulting in higher distribution costs (Liebermann 1984).

Impact on the Consumer

Manufacturers and distributors are not the only constituents to be affected by the increase in liability suits and awards. Clearly, the objective of liability statutes is to provide protection for the consumer and compensation for those individuals experiencing product-related injury. However, the effectiveness of current laws in obtaining the goals is questionable. According to Liebermann (1984, p. 63), "although the declared purpose of product liability legislation is to protect consumers from specific purchasing hazards, it actually rather

causes them harm and infringes their economic welfare." Some of the negative consequences of liability legislation on the consumer follow.

Impact on General Consumer Attitudes

The statistics reported on liability awards, insurance premiums, and legal expenses are only part of the picture. Although much more difficult to calculate, the impact of negative publicity and eroded consumer confidence in firms experiencing liability difficulties can be equally devastating. Empirical studies have found negative information, such as a product-related injury, is capable of significantly affecting consumer consumption related beliefs and attitudes. In fact, it has been shown that a single item of negative information is capable of neutralizing five similar pieces of positive information (Richey, Koenigs, Richey, and Fortin 1975). Other research has found negative information results in more strongly held attributions regarding product beliefs than does positive information (Mizerski 1982) and the effect of negative information is more enduring than positive information (Cusumano and Richey 1970; Richins 1983). Researchers have also shown that negative information more strongly influences attitudes and purchase intention than does positive information, particularly in the service sector (Weinberger and Dillon 1980). Thus, the competitive position of a firm involved in liability litigation can be expected to weaken. While placing a specific dollar amount on the negative impact of product liability episodes is impossible, these are very real costs that must be considered when assessing the consequences of liability litigation.

Higher Costs

The expense of liability insurance, legal defense, and liability awards are passed on to the consumer just like other costs of production and distribution. These costs, however, are increasing at a much faster

rate than other costs associated with the manufacturing and marketing of goods and services. As an extreme example, a dose of diphtheria-tetanus-pertussis vaccine increased from ten cents to $2.80 in ten years, an increase attributed almost exclusively to liability costs ("Product Liability..." 1985). In fact, the American Medical Association recently reported that 95% of the cost of all vaccines goes toward liability expense ("Product Liability..." 1985). Earlier we provided general aviation as an example of an industry particularly hard hit by the liability crisis. Again, the liability costs have been passed along to the consumer. As illustration, Beech Aircraft's popular A36 Bonanza has remained basically unchanged for more than a decade, while the base price has increased from $82,000 in 1980 to $257,500 in 1990 ("Current Production..." 1990). Once more, the increase is attributed to skyrocketing product liability costs.

Reduced Product Assortment

Rising costs of liability defenses and settlements have reduced the range of products offered to the consumer. For example, Merrell Dow Pharmaceutical's anti-morning sickness drug, Bendectin, was charged with causing or contributing to birth defects. Despite "nearly universal scientific consensus" regarding the safety of the drug and full approval from the Food and Drug Administration, Merrell Dow was eventually forced to halt production and sales of Bendectin due to the expense of continued liability litigation defense (Olson 1989, p. 137). Similarly, G. D. Searle has removed the firm's interuterine devices (IUDs) from the marketplace as liability defense and awards accounted for nearly 20 percent of annual sales. In the sporting goods field, we have witnessed liability costs force ten of the thirteen manufacturers of football helmets to withdrawal from the marketplace ("Product Liability..." 1985). These are just a few examples of a wide variety of goods and services that have been either removed from the marketplace entirely or

whose availability has been markedly reduced due to increasing risk of liability penalties.

Objectives of the Study

The main goal of the study is to provide a more complete picture of consumer-juror evaluation of product liability cases. To accomplish this objective, a theoretical model of product liability is developed and empirically tested. Specifically, this study: (1) develops an attributional model of the product liability process; (2) examines the influence of selected managerial factors on assessment of responsibility for product-related injuries and jury awards; (3) investigates the role of several individual difference variables in the liability process; and (4) examines the mediating roles of "unanticipated consequences" of product usage, assessment of responsibility for the incident, and affective feelings toward the plaintiff and defendant. Each of these factors are discussed below.

An Attributional Model of the Product Liability Process

To accomplish the objectives of the study, a theoretical model of the product liability process was developed. Based predominantly on work conducted in the area of achievement motivation by Bernard Weiner (1985a), the model depicts the attributional sequence we propose a consumer goes through in evaluating a product-related injury. The model provides a theoretical structure incorporating (1) defendant firm factors; (2) individual difference characteristics of the consumer/juror; (3) the mediating variables of unanticipated consequences, assignment of responsibility, and affective reaction; and (4) the dependent measure of jury award. Using an experimental design, consumers are exposed to product liability scenarios manipulating the firm factors and asked to respond as they would in the role of juror. A general form of the model is presented in Figure 1.1.

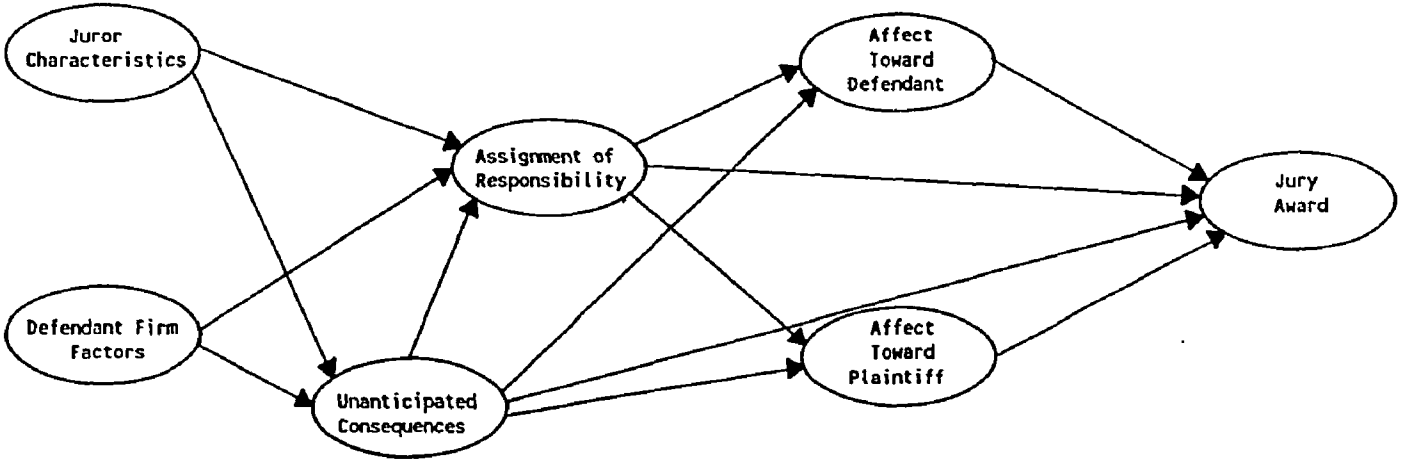

Figure 1.1

General Form of the Research Model

The proposed relationships in the liability model are derived from various elements of attribution theory. Kelley (1973, p. 109) defined attribution theory as "a theory about how people make causal explanations, about how they answer questions beginning with "why?" It deals with the information they use in making causal inferences, and with what they do with this information to answer causal questions." According to Kelley (1967, p. 193), an individual is motivated "to attain a cognitive mastery of the causal structure of his environment." Consistent with Kelley, we feel that people have a desire to understand why product-related injuries occur. In their role as a consumer, individuals are frequently exposed to media sources reporting stories of injuries resulting from products they themselves use. In their role as a juror, individuals are forced to consider the causes of these injuries and determine precisely when and how much compensation should be awarded. In both roles, attribution theory offers a framework for predicting consumer-juror responses to product-related injuries.

Firm Related Factors

A major goal of the study is to improve managerial decision-making. Thus marketing-related factors influencing product liability court cases that are both important to the consumer and actionable by management are key components of the research model. Based on a review of the marketing, psychology, and legal literature and primary qualitative research (focus groups) efforts, we propose a series of firm related factors that, theoretically, should influence a juror's evaluation of product-related injuries.

Individual Difference Variables

Individual difference variables may influence how consumer/jurors interpret and evaluate product liability scenarios. Surveys of relevant literature identified a number of individual characteristics that had

been found significantly related to jury verdicts. In addition, several other individual difference variables that have not been empirically tested, but can be theoretically supported, will be included in this study. Each of the individual characteristics and their hypothesized relationship with other constructs in the model will be discussed in detail.

Intervening Variables

As depicted in our theoretical model, we expect the relationship between the antecedents of causal attributions (firm related factors and individual difference characteristics) and jury award to be to be mediated by additional variables. Specifically, three constructs, "unanticipated consequences" of product usage, assessment of responsibility for the incident, and affective feelings toward the plaintiff and defendant are hypothesized as mediating variables. Earlier studies of product failure provide support for the mediating role of attributions (e.g., Valle and Wallendorf; Krishnan and Valle 1979; Folkes 1984; Folkes, Koletsky, and Graham 1987). Similarly, a previous study has examined the role of affect in jury trials and supports the existence of a mediating role (Darden, Deconinck, Babin, and Griffin 1991). Although unanticipated consequences of product usage has not been previously studied in this manner, we will present a theoretical argument for its inclusion in a behavioral model of the liability process.

Contributions of the Study

This research addresses an area of growing importance to the consumer, marketing practitioner, and society as a whole that has received only minimal prior attention. The study makes a number of practical contributions. A more thorough understanding of consumer reaction to liability incidents will enable marketers to better assess

their exposure to liability suits and develop more effective marketing strategies. Also, this investigation provides public policy makers with information useful in establishing policy regarding product liability issues. Finally, this study makes a theoretical contribution through a unusual application of attribution theory and the development of the model of "unanticipated consequences." Each of these contributions are discussed below.

Marketing Management

This study will help marketers determine their relative exposure to liability risks and provide before-the-fact information to help develop marketing strategies consistent with that level of exposure. For example, how does the inherent danger of the product affect consumer/juror evaluation of product-related injuries? Do consumers display a tendency to hold producers of dangerous products more liable than firms producing products typically considered less dangerous, even though an identical injury results? This information could be useful in preparing firms for possible litigation and determining the necessary levels of liability insurance.

Safety devices/guards represent another example of a managerial decision regarding product safety. Is there a benefit from exceeding the safety requirements established by government agencies? Under the legal doctrine of strict liability, actions of the manufacturer are irrelevant if an injury occurs (see Morgan 1982). Thus, in a pure legal sense, simply meeting the safety regulations is sufficient and anything in addition is wasted. However, a more lenient attitude may result from exceeding the government standards if consumer/jurors consider the "intent" of the manufacturer. Similarly, how does the consumer/juror react to a theme of safety in advertisements? According to Busch and Hair (1980), 61% of the manufacturing executives surveyed thought that a good product safety record should not be promoted. Does the average

consumer share this belief? This study provides theoretically based answers to these and several similar questions, a contribution directly applicable to marketing management.

Public Policy in Marketing

A wide range of marketing decisions including pricing policies, distribution systems, and advertising claims are governed by public policy regulations. The area of product safety, however, may be the most heavily regulated aspect of the marketing discipline (Werner 1982). Beginning with the Pure Food and Drug Act of 1906, we have witnessed a steady stream of government legislation and agencies designed to protect the consumer from unsafe products. The marketing academic community has responded by investigating the attitudes and opinions of various parties involved with public policy and keeping the discipline abreast of developments in product safety legislation. As examples, Busch (1976) surveyed bicycle manufacturers to determine their evaluation of Consumer Product Safety Commission (CPSC) safety regulations. Later, Busch and Hair (1980) compared the attitudes of three different parties, manufacturing executives, insurance executives, and state insurance commissioners, regarding a variety of product safety issues. Taking a different approach, Morgan (1982; 1986; 1988b; Morgan and Avrunin 1982) extensively reviewed product liability legislation and court cases. Each of these studies has provided valuable insight into a diversity of public policy issues.

Despite being the focal point of all this attention, it appears the average consumer has very little input as to the direction of public policy decisions regarding product safety. The present research will compliment previous studies by offering attitudes, opinions, and reactions from the consumer's perspective. By better comprehending consumer perception of certain product liability issues, policy makers

can make more informed decisions regarding product safety regulations and liability legislation.

Theoretical Contribution

This study provides the opportunity for substantial theoretical advancement. Very few attribution studies have investigated both the antecedents and consequences of causal attributions (Folkes 1988). The proposed research model, however, incorporates both. Furthermore, an extended causal sequence, including affective reactions as intervening variables between causal ascriptions and behavioral consequences, is tested. We feel that this sequence is relevant not only in the product liability context, but is generalizable to attributional studies in other fields as well.

Prospect theory, presented by Kahneman and Tversky (1979, 1984; Tversky and Kahneman 1981) posits an individual's decision-making process differs between the realm of gains and the realm of losses and "the response to losses is more extreme than the response to gains" (1981, p. 454). Oliver and DeSarbo (1988, p. 499) explicitly incorporate prospect theory in their investigation of consumer satisfaction:

> "We used the large-versus-small gain situation [as opposed to a gain versus a loss]. . . because recent findings in behavioral decision theory suggests that an individual's risk structure changes as one moves from the domain of gains to the domain of losses. Because it is not known how this phenomenon would effect our results, we focused on the domain of gains, although future researchers should consider losses and mixed outcomes."

Furthermore, Weiner (1985a) points out that individuals are more motivated to make casual attributions in situations involving negative affect. Clearly, the product liability scenario represents the "domain of losses" and involves substantial negative affect. Thus the context of this research offers a unique setting for the study of causal attributions and an opportunity to gain a better understanding of the theory.

An additional theoretical contribution comes from the development of a behavioral model of "unanticipated consequences." In our model, unanticipated consequences can be thought of as a commingling of disconfirmation theory with prospect theory. Rather than merely experiencing a product (or service) performance worse than expected, or even complete product failure, unanticipated consequences infers a negative outcome not even in the consumer's realm of possibilities. Consider a brief example as illustration. When purchasing a new lawn mower, a consumer has a set of performance expectations regarding the mower's ease of starting, durability, cutting ability, maintenance requirements and so forth. Negative disconfirmation would occur if either the mower's performance on these attributes failed to meet the prior expectations or even if the mower failed to operate at all. We propose, however, that if a totally unanticipated outcome - such as a product-related injury - were to occur the disconfirmation paradigm is insufficient to capture the consumer's reaction. In the terms of prospect theory, the consumer has shifted from the domain of gains (no matter how small) to the domain of losses with an entirely different set of value functions operant. A more extreme reaction and exceptionally strong attributions should result. This study more fully develops the concept of unanticipated consequences and tests it within a behavioral model.

Summary

The current research makes a contribution from both a managerial and theoretical perspective. The study combines the marketing and legal disciplines, and compliments and extends areas of psychological research. Marketing managers will directly benefit from increased knowledge of consumer reaction to the manipulation of marketing mix variables. Likewise, liability attorneys will gain insight into the effect of individual differences among jurors in liability cases.

Finally, an important theory will be extended by testing under extreme conditions.

Limitations of the Study

The potential contributions of this research have been discussed in some detail. These contributions, however, must be considered in light of corresponding limitations of the study. Two limitations in particular warrant discussion.

First, the external validity or realism of the method used to obtain the data may pose limitations as to the degree of generalizability of the findings. In this study, subjects are presented with written legal protocols and asked to respond as they would as a member of a jury evaluating the liability case. Two questions regarding this approach can be posed:

(1) Is a written scenario an acceptable substitute for an actual court case?

(2) Does the individual response of a subject, ignoring the group influence, reflect how that person would vote as a member of a jury?

We believe the answer to both of these questions is yes. There is strong support that scenarios are an accepted, or even preferred, method for studying jury decision making (Alexander and Becker 1978). Regarding the second issue, Simon's (1980) investigation of jury decisions found that juror's individual positions prior to deliberation matched the jury's ultimate verdict over 80% of the time. More detailed support for the methodology employed is provided in Chapter Three. Despite evidence supporting the methodology used in the study, the results must be evaluated with this limitations in mind.

Second, we must limit the scope of the present research. While an extensive list of specific situational influences, firm and plaintiff factors, and affective reactions are depicted in our extended model of the liability process, we make no claim that we have proposed a fully specified model. Likewise, it is not feasible to test all the possible

relationships and interactions that could be derived from the theoretical model. Thus we must restrict ourself to testing a limited, yet representative, number of main effects.

Organization of the Study

The study is presented in five chapters. Chapter One provided an overview of the research topic. The importance of the liability crisis to the marketing practitioner, consumer, and society was discussed and the research objectives and a general model of the liability process presented. Anticipated contributions and limitations of the study were also provided.

Chapter Two provides a review of the relevant background literature. The chapter familiarize the reader with the different legal theories of product liability and their chronological development, then reviews the product liability research appearing in the marketing literature. A review of prospect, disconfirmation, and attribution theories is presented. Based on the empirical and theoretical literature reviewed, a behavioral model of the product liability process is developed and specific hypotheses proposed.

Chapter Three presents the methodology necessary to test the model and research hypotheses. The sampling frame and data collection procedure are specified. Development of the experimental constructs and manipulations are presented, including results from pretests. The analytical techniques proposed for testing the research model are discussed.

Chapter Four examines the results of the statistical analysis. The results of the test for each individual hypothesis is presented.

Chapter Five concludes the study. The results of the study are summarized, then conclusions and implications for marketing management, the legal field, and public policy makers discussed. Finally, opportunities for continued research in the area are offered.

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

This study blends the marketing and legal disciplines to create a testable model of the consumer's perspective of the product liability process. Chapter Two provides a review of the literature necessary to comprehend product liability legal theories and build and test the research model. First, the evolution of product liability legislation is summarized to familiarize the reader with the legal context of the current study and the legal parameters of a product liability suit. In addition, some of the factors incorporated into the research model are derived from our review of the legal literature. Next, the relevant academic research in the product liability area is reviewed, including both the *case method* and *behavioral approaches* to studying product liability. The review of the liability literature is followed by a discussion of the theoretical background necessary to develop an attributional model of the product liability process. Based on a critical evaluation of the theoretical and empirical literature, as well as qualitative research and deductive logic, the research hypotheses are proposed.

The Evolution of Product Liability Laws

Product liability is a collage of common law, state and federal statutes, and federal agencies such as the Consumer Product Safety Commission. More than anything else, however, product liability laws are intended to be a reflection of society's prevailing beliefs, attitudes, and priorities. To better comprehend current product liability statutes, and certainly to anticipate future trends, one must appreciate the rich legacy of today's product liability laws. This section presents an overview of prominent events and developments in the

history of product liability legislation and illustrates the relationship between consumer and societal attitudes and public policy formation.

Thirteenth century English criminal statutes provide some of the initial references to product liability. In particular, these early ordinances forbid the sale of "corrupt food or drink" (Dickerson 1951, p.20). All producers and handlers of consumable products were required to possess at least the degree of skill prevailing in their trade (Houtz 1944). The enthusiasm with which these original product liability laws were enforced is displayed by "the multitude of rascals immortalized in musty records of old London Towne because often enough the baker went to the pillary and the ale-wife to the tumbrel for poor loaves and insufficient gallons" (Houtz 1944, p.296).

Broadening the application of liability beyond "food and drink" is largely attributed to medieval guilds. Pirenne (1933) depicts guilds as an attempt by society to maintain economic stability and the status quo. Guilds expanded liability to virtually all products:

> The rigid regulation of the guild craftsmen made scamped workmanship...as dangerous in industry as was adulteration in food. The severity of the punishments inflicted for fraud or even carelessness is astonishing. The artisan was subject to constant control of municipal overseers, who had the right to enter his shop by day or night and also to that of the public, under whose eyes he was ordered to work at his window. (Pirenne 1933, p.173)

The guilds' regulations left little to chance. The tailor's guild, for example, went so far as to specify the number of stitches to be made on a man's collar, with any variation considered a punishable offense (Pirenne 1933, p. 173). During this time period, liability suits were most commonly brought under the doctrine of trespass (see Exhibit 2.1).

Exhibit 2.1

Product Liability Legal Doctrines

Trespass is an outgrowth of contract law. Under trespass, establishing intention, fault, or negligence is unnecessary. A plaintiff is simply required to show that an injury had occurred and that the defendant was the cause of that injury. Essentially, the question of trespass involves the determination of "did the act of 'A' cause the injury to 'B'". Therefore, trespass can be considered a form of absolute liability.

Negligence is a violation of a manufacturer's duty to use ordinary care under given circumstances in all areas of design, production, distribution and promotion. If a person of ordinary prudence would not have performed the act, it is a negligent act. To demonstrate negligence, the plaintiff has the burden of documenting not only that a defect is present, but also how that defect arose. Furthermore, negligence considers the actions of the plaintiff as well as the defendant in establishing fault.

Strict Liability holds whenever a product is sold in a defective condition unreasonably dangerous to purchasers or consumers. Strict liability eliminates some of a plaintiff's burden of proof required under negligence. The injured party need not establish any negligence on behalf of the manufacturer, but simply show that a defect attributable to the manufacturer causally related to the plaintiff's damage.

Warranty is a contractual theory of recovery governed by principles of sales. Both implied and expressed warranties have been found to constitute liability. An expressed warranty is a representation by a manufacturer regarding the product's quality or characteristics. Implied warranty exists even when no expressed warranty is present, resulting instead from the mere fact that a transaction has taken place. An implied warranty guarantees a product to be suitable for the purposes for which it is typically used.

The Trespass Era

Trespass dominated liability litigation prior to 1850. An excellent example of trespass is furnished by the case of *Ward v. Weaver*, brought before the Kings Bench in 1616 (Spacone 1985). In this case, Ward and Weaver were both soldiers engaged in a military exercise. Weaver was held liable for injuries suffered by Ward, although evidence indicated the defendant was not careless or negligent in any manner. In spite of its ruling for the plaintiff, the court did note a limit to its holding. The court stated that liability could not be established in cases where "no free will could be found in the causal act...as if a man by force take my hand and strike you" (quoted in Spacone 1985, p. 4).

The overriding limitation on recovery for personal injury under contract law was the doctrine of privity. Originally established by the English case of *Winterbottom v. Wright* (1842), privity would be a central tenet of product liability litigation for over a century. In this case Winterbottom, a passenger in a mailcoach, was injured by an accident due to poor maintenance of the coach. Subsequently, Winterbottom brought suit against Wright, the party responsible for maintaining the coach. Lord Abinger ruled:

> There is no privity of contract between these parties; and if the plaintiff can sue, every passenger, or even any person passing along the road, who was injured by the upsetting of the coach, might bring a similar action. Unless we confine the operation of such contracts as this to the parties who entered into them, the most absurd and outrageous consequences, to which I can see no limit, would ensue.

Thus *Winterbottom* initiated the philosophy that a product manufacturer was liable only to an injured party with whom it had a direct contractual relationship, or, as William Prosser (1971 p. 641) interpreted the general rule, "the original seller of goods was not liable for damages caused by their defects to anyone except his immediate buyer, or one in privity with him". It is important to acknowledge this ruling as a reflection of society's attitudes during the time period. The industrial revolution was just beginning, and

refusing to provide liability plaintiffs with compensation was evidence of legal support for industrial and economic development.

Development of Negligence

Following Andrew Jackson's election (1828), industrial expansion occurred rapidly and the U. S. mercantile society gave way to "rugged individualism" and the principles of laissez-faire. Personal wealth and industrial growth with minimal governmental interference became widely held core values among Americans. To succor the growth of industry in general, and the expansion of railroads in particular, a new legal philosophy regarding liability was required.

Negligence was the resulting legal philosophy (see Exhibit 2.1). Better suited for the settlement of disputes than trespass, negligence balanced the risk of a product against its benefits. In addition, negligence possessed a certain "moral" dimension. The prevailing thought was that an individual should not be liable unless he was guilty of wrongdoing or fault - consistent with the opinion in the mid-1800s that America had become more democratic. Accordingly, negligence is assessed only if a defendant's conduct is deemed "unreasonable" (Morgan 1982).

An early application of the theory of negligence is found in the personal injury cases of *Losee v. Buchanan* (1873). *Losee* epitomizes the relationship between liability legislation and societal views by discarding absolute liability in favor of negligence. The court concluded the "social contract" of negligence was best suited to a young and growing industrial nation. Further, the court noted that "factories, machines, dams, canals, and railroads" are "demanded by the manifold wants of mankind, and lay at the basis of all our civilization" (*Losee v. Buchanan* 1873, p.484).

Negligence was also applied in liability litigation between employees and employers. The case of *Lamson v. American Axe and Tool Company* (1900) portrays the application of negligence in work place

accidents. Lamson, a worker in the American factory, was concerned about the danger involved in working around hatchets stored perilously on a rack. When the plaintiff informed his employer of the circumstances, he was instructed to continue working or face dismissal. Subsequently, the rack did give away resulting in injury to Lamson. Despite empathizing with Lamson's dilemma, Justice Holmes considered it irrelevant and ruled in favor of the defendant. Holmes concluded that the plaintiff knew of the danger involved and chose to accept that risk. In further discussion of the doctrine of voluntary assumption of risk, Bohlen proclaimed (1906, p. 14):

> The maxim *volenti non fit injuris* is a terse expression of the individualistic tendency of the common law, which ...naturally regards the freedom of individual action as the keystone of the whole structure. Each individual is left free to work out his own destinies; he must not be interfered from without, but in the absence of such interference he is held competent to protect himself. While therefore protecting him from external violence,...common law does not assume to protect him from the effects of his own personality and from the consequences of his voluntary actions or of his careless misconduct.

Although Bohlen was directing himself toward liability in the workplace, the "assumption of risk" ruling is equally relevant for product-related injuries. That is, if a consumer perceives the risk involved in the use of a product, yet chooses to use the good, he assumes the risk of product use.

These cases serve to portray the priority placed on individual freedom in the mid-to-late 1800s. Laissez-faire was the mood of society; liability law reflected this viewpoint and enhanced the growth of industry. This mood would not last, and changed in the early 1900s to one of Progressivism.

Decline of Negligence

Although negligence would remain the principal legal theory of product liability in the first half of the twentieth century, changing societal views began to pave the way for the emergence of strict liability. The election of Theodore Roosevelt in 1901 signaled a shift

in the primary political philosophy from laissez-faireism to progressivism (see Spacone 1985, p. 15). This change was not an abrupt turnaround, but instead a move to place some constraints on the concentration of market power and improve the adversity endured in the work-place. In other words, progressivism sought to serve the individual in addition to the economy as a whole. In particular, the desirability of redistributing wealth from the rich to the poor was gaining momentum.

With little doubt, the most damaging blow to the doctrine of privity and the legal theory of negligence (and perhaps the most influential legal decision of the early 1900s) was struck by the case of *MacPherson v. Buick Motor Company* in 1916. *MacPherson* involved an automobile manufactured with a defective wheel. Subsequently the wheel collapsed, resulting in injury to its ultimate purchaser (MacPherson). Justice Benjamin Cardozo of the New York Court of Appeals rejected the privity of contract requirement in this case. Cardozo asserted that in the production of "inherently dangerous" products the manufacturer has a duty to exercise reasonable care. In his decree, Justice Cardozo charged:

> If the nature of a thing is such that it is reasonably certain to place life and limb in peril when negligently made, it is then a thing of danger. Its nature gives warning of the consequences to be expected. If to the element of danger there is added knowledge that the thing will be used by person other than the purchaser and used without new tests, then irrespective of contract, the manufacturer of this thing of danger is under a duty to make it carefully.

With this verdict, it became possible for an injured party to file suit in the absence of privity. Nonetheless, prevailing in a product liability suit on the basis of negligence remained difficult. To successfully undertake a liability suit under the doctrine of negligence, plaintiffs had to meet at least three requirements:

(1) A plaintiff had to prove a duty was owed by a defendant;

(2) Breach of said duty had to be shown; and

(3) Breach of duty had to be established as the actual or proximate cause of a plaintiff's injuries.

Rise of Strict Liability

Three individuals, Fleming James, Friedrich Kessler and William Prosser, played influential roles in guiding the course of liability statutes from negligence to strict liability (see Exhibit 2.1). James was a strong proponent of "no-fault" principles and redistribution of wealth. James (see James 1965) suggested negligence was not in the best interest of either the injured party or society as a whole because (1) compensation for an injured party was not assured, (2) accident losses were not distributed as widely as possible, and (3) the present system did little to deter future accidents.

Kessler attacked negligence more directly by questioning the appropriateness of the central postulates of contract law. Kessler (1943) charged that a basic assumption of contract law - that the parties involved are relatively equal in bargaining strength - no longer held. Kessler contended that with the advent of mass-produced goods, consumers possessed far less bargaining leverage than product manufacturers. Thus, consumers had little authority over the terms of a contract. Specifically, Kessler argued that standard contracts were conscientiously constructed to minimize manufacturers' liability. Therefore, Kessler focused his criticism on the wounded (*MacPherson v. Buick Motor Company* 1916), but lingering, concept of privity of contract.

Kessler embodied the metamorphosis of societal ideals from individualism and the principles of laissez-faire to sharing of the wealth. Kessler (1944, p. 36) claimed "The legitimacy of individual strivings is judged by their contribution to the common weal." In applying this philosophy to law, Kessler concluded (1944, p. 54):

> Modern realists have devoted their energies...to the task of rebuilding our democracy in accordance with new social needs. They have joined the New Deal and its agencies, abandoning Locke's idea of the neutral state and returning to Bentham's state of social reforms in the interest of the greatest happiness of the greatest number. Law to them is more than an argumentative technique...it is a unified attempt at freedom and social justice.

William Prosser was one of the most influential legal academicians of the 1940s and 50s. Prosser (1941) was even more extreme than Kessler, directly criticizing privity of contract and calling for its repeal and replacement by strict liability. Shortly after Prosser's writings, Justice Roger Traynor of the California Supreme Court put another nail in the coffin of privity of contract and the theory of negligence. Presiding in the case of *Escola v. Coca Cola Bottling Company* (1944, p. 443), Justice Traynor asserted that product liability statutes operational at the time were a by-product of a former era which emphasized individualism and "close relationship between the producers and the consumer." Traynor implied that courts, by allowing juries to determine if negligence had occurred in liability cases irrespective of the evidence, had in fact been applying strict liability under the guise of negligence and warranty. Consequently, Justice Traynor outwardly rejected negligence and ruled in support of the plaintiff under the theory of strict liability.

In *Escola* Justice Traynor set forth three postulates which established the foundation for future liability cases. First, the increasing technical complexity of manufacturing processes and lengthening chains of distribution handicapped consumers and made recovery difficult under negligence. Second, negligence failed to successfully deter manufacturers from making unsafe products. Traynor felt that, due to the increased likelihood of establishing liability under the strict liability doctrine, manufacturers would be forced to exercise greater caution in manufacturing and distribution. Third, and perhaps most important, a manufacturer was in a better position than an injured party to sustain costs of injury. This is an early application

of loss distribution theory or "risk spreading." From a societal point of view, it makes sense for manufacturers to absorb the cost of product-related injuries because they can better distribute those costs across society by mechanisms such as pricing and insurance (see Glasscock 1987).

The knockout punch to privity was delivered in *Greenman v. Yuba Power Products Incorporated* (1963), also decided by Justice Traynor. In *Greenman* the plaintiff was injured by a power tool manufactured by the defendant, but actually purchased from a third party by the plaintiff's wife. Thus no privity of contract existed between the plaintiff and defendant. The court ruled there was no evidence of negligence on the part of the retailer or breach of expressed or implied warranty. Strict liability in tort, on the other hand, did apply. Under the theory of strict liability, the plaintiff only had to establish that a defect in the product resulted in the plaintiff's injury. Greenman did so and was awarded compensation. For all practical purposes, the concept of privity was dead.

Strict liability was introduced into federal statutes in 1965 with the enactment of the *Restatement (Second) of Torts*, Section 402A(I). Section 402A adopted the "unreasonably dangerous" standard pioneered by Justice Cardozo in *MacPherson v. Buick Motor Company* (1916) and shifted the focus of liability litigation from the conduct of the manufacturer to the condition of the product. In effect, the burden of liability was shifted from the plaintiff to the defendant. Traditional defenses of contributory negligence, assumption of risk, and even "state of the art" were substantially weakened. The net result has been an "explosion" in the number of liability lawsuits and the size of awards (see Settle and Spigelmyer 1984). Section 402A states:

> 1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if,

a) the seller is engaged in the business in selling such a product, and
b) it is expected to and does reach the user or consumer without substantial change in the condition in which it is sold.

2) The rule stated in Subsection 1) applies although
a) the seller has exercised all possible care in the preparation and sale of his product, and
b) the user or consumer has not bought the product from or entered into any contractual relation with the seller.

The intent of Subsection 2a) is to abolish the requisite of establishing negligence in liability cases once and for all. Similarly, Subsection 2b) disposes of all privity of contract requirements.

Ensuing law suits have extended the *Restatement* by explicitly defining such terms as "defective condition" and "unreasonably dangerous." In general, defects may be due to either inadequacies in manufacturing or deficiencies in design (Frank and Ringkamp 1977). "Unreasonably dangerous" holds different interpretations in the eyes of the beholder and often is judged in relation to the benefit of the product. *Caputzal v. The Lindsay Corporation* (1966) established that "a product is not unreasonably dangerous if a reasonable person knowing of the flaw would still place the product on the market due to the fact that the risk of harm is minor compared to the utility of the product." Despite this operational definition, determining if a particular product is "unreasonably dangerous" remains a question for the jury to decide.

The Theory of Warranty

While the controlling theories of product liability appear to have evolved from trespass, to negligence, and finally to strict liability, many cases have also been settled under theories of warranty (see Exhibit 2.1). In fact, Kulp (1942) estimates that in the late 1930s as many as one-half of all product liability claims were brought under either expressed or implied warranty. Warranty remains a cornerstone of product liability litigation.

Expressed warranty doctrine originated in the case of *Baxter v. Ford Motor Company* (1932). In *Baxter*, the plaintiff received injuries when the windshield of his automobile shattered. Even though Ford was not found negligent in the manufacture of the windshield, a widely circulated piece of advertising material had stressed the "shatterproof" nature of the automobile's windshield. On the basis of violation of expressed warranty, the court held the defendant liable.

The doctrine of implied warranty is exemplified by *Henningsen v. Bloomfield Motors, Incorporated* (1960). Henningsen claimed she incurred injuries in an accident due to a failure in the steering mechanism of her husband's new automobile. The court refused to find the defendant negligent in the manufacture of the automobile or in expressed warranty. However, the court did find for the plaintiff under the doctrine of implied warranty - the automobile was determined not to be "of average quality and suitable for the purpose for which it was intended" (*Henningsen* 1960).

Additional Developments in Product Liability

Plaintiff's rights and the role of warranty in liability litigation were reinforced in the 1940s by a movement to establish a national code of warranty law. This campaign ultimately resulted in the Uniform Commercial Code (UCC) being embraced by many states in the mid-1950s. The UCC established uniform warranty rights for consumers not limited by state boundaries and statutes. Later the UCC would be amended to prohibit privity of contract requirements in breach of warranty cases, extending protection to:

> any natural person who is in the family or household of the buyer or who is a guest in his home if it is reasonable to expect that such a person may use, consume or be affected by goods and who is injured in person by breach of warranty. A seller may not exclude or limit operation of this section. (*Uniform Commercial Code*, Section 2-318, 1970)

The consumer movement of the 1960s significantly impacted product liability. Inspired by consumer activists such as Ralph Nader and his

well-known book *Unsafe At Any Speed* (1965), consumers became increasingly aware of the fact that no one was safe from injury due to unsafe or defective products. To fight such goods, consumers banded together into an influential political force. The passage of the Consumer Product Safety Act (CPSA) and formation of the Consumer Product Safety Commission (CPSC) in 1972 can be at least partially attributed to the consumer movement (for a succinct discussion of the CPSA and CPSC see Sutton 1979). The CPSA and CPSC replaced a "piecemeal" approach to consumer product safety legislation with a comprehensive federal agency charged specifically with reducing injuries due to unsafe consumer products.

One case holding clear relevance to marketers, illustrating the extension of absence of privity and the development of "deep pocket" theory, was decided in 1977. *Moning v. Alfono* applied the Uniform Commercial Code to bystanders. Eleven-year old Joseph Alfono purchased two slingshots from Campbell Discount Jewelry, Alfono then gave one to his friend, twelve-year old Royal Moning. While playing with the slingshots, Alfono shot Moning in his left eye destroying his vision. Moning filed suit against Alfono, as well as the manufacturer, wholesaler, and retailer of the slingshot claiming they had negligently produced and marketed slingshots directly to children. Following the precedence established in *MacPherson v. Buick Motor Company* (1916), *Escola v. Coca Cola Bottling Company* (1944), and *Greenman v. Yuba Power Products, Incorporated* (1963), the Supreme Court of Michigan ruled that no privity of contract was required.

Moning stands as the earliest acknowledgment by the Michigan Supreme Court, and one of the first in the United States, that every member of a marketing channel owes a legal duty to those affected by its products. Furthermore, the court ruled that marketing channel members potentially incur liability for injuries to bystanders by negligently

distributing a product which is neither defective nor inherently dangerous (Howard 1977).

A case settled by the New Jersey Supreme Court removed an additional barrier from plaintiff recovery in liability suits. *Beshada v. Johns-Manville Products Corporation* (1982) brought into question the "reasonably knowable" dangers in a strict liability case. The court's decree stated:

> Defendants have argued that it is unreasonable to impose a duty on them to warn [of reasonably knowable dangers]...We impose strict liability because it is unfair for the distributors of a defective product not to compensate its victims...it is the distributors - and the public which consumes their products - which should bear the unforeseen costs of the product. (*Beshada* 1982, p. 549)

Thus the duty to warn was extended to dangers that a manufacturer "should" be aware of, even if in fact they are not. In addition, *Beshada* established precedent disallowing the "state of the art" defense and stands as an explicit application of risk spreading theory.

One of the most recent developments in liability litigation is market share liability. Unlike other legal doctrines which require proof that a particular defendant caused an injury, market share liability only requires the plaintiff establish that one of multiple named defendants likely caused the injury (Sheffet 1983). Established in *Sindell v. Abbott Laboratories Incorporated* (1980), market share liability allows a plaintiff who suffered a physical injury due to a defective product marketed by an unknown manufacturer to bring suit against firms constituting a "substantial percentage" of the market (*Sindell* 1980, p. 602). In this landmark case, Judith Sindell brought a class action suit against Abbot Laboratories and five other companies which manufactured diethylstilbestrol (DES), a commonly prescribed miscarriage preventative, between 1941 and 1971. Sindell charged that the manufacturers of DES knew, or should have known, that DES was ineffective in preventing miscarriages and carried substantial risks to the unborn child (DES may cause vaginal and cervical cancer in women

exposed to the drug before birth). However, Sindell was unable to identify which firm, out of approximately 200 manufacturers of DES, produced the drug taken by her mother.

Although unable to find for the plaintiff under any of several already established doctrines of liability (alternative liability, concert of action, and enterprise liability); the court did not want the manufacturers to escape liability for the harm caused by DES and, consequently, found for Sindell. In another application of the philosophy of risk spreading, the court declared "defendants [rather than plaintiffs] are better able to bear the cost of injury resulting from the manufacture of a defective product" (*Sindell* 1980, p. 600). This ruling holds immediate relevance to marketers by expanding liability horizontally across several producers serving the same market. In addition, this case illustrates that liability litigation may occur a long time after the product has been withdrawn from the marketplace.

Summary

This section presented an historical perspective on product liability legislation to enable the reader to better appreciate the legal parameters and problems facing business today. In many ways, liability laws have "come the full circle," moving from *caveat emptor* (let the buyer beware) to *caveat venditor* (let the seller beware). Hopefully, by understanding the complex history of product liability, designers, manufacturers, distributors, and advertisers of consumer goods can better protect themselves from damaging liability litigation, while increasing the marketability of their product offering. Knowledge of the legal environment compliments the present research, which provides input from the consumer's perspective regarding society's current attitudes toward product liability issues. Such information should prove valuable in managerial decision-making and future public policy formation. From our review of the history of product liability litigation we can conclude:

- Product liability laws have been in almost a constant state of change for centuries.
- Liability laws tend to be isomorphic with the society's desires. In other words, significant changes in marketing-related legal philosophy have reflected the prevailing social, economic, and political mood of society.
- Loss distribution theory, or the concept of risk spreading, is a central theme of product liability litigation.
- Despite the complex body of relevant legislation, what constitutes a liable action frequently is reduced to the jurors' perception (i.e. what is "unreasonably dangerous").
- If laws reflect the will and intent of society, then modern product liability laws represent standards of liability which consumers at large expect marketers to maintain.
- Recent changes and current trends in liability litigation indicate that marketing practitioners face greater product liability exposure than ever before. In fact, the past two decades have witnessed unprecedented escalation in the number and size of product liability awards.

Product Liability Research in Marketing

The marketing discipline is well aware of the impact of legal restrictions on marketing decision-making including the regulation of advertising, pricing, credit practices, and channels of distribution. Similarly, the influence of product safety regulation and liability legislation has received some attention. In fact, in the past fifteen years a substantial amount of research on the product liability issue has appeared in the marketing literature. Research on this topic can be categorized into (1) a form of case analysis, typically non-empirical studies relating recent legislation or court cases to the marketing discipline or (2) behavioral research, including the development of behavioral models of the product liability process and surveys of various constituents influenced by product liability legislation. The following section reviews the relevant studies in both of these categories. Reviewing this literature informs the reader of the marketing implications arising from product liability, identifies

important constructs for inclusion in the research model, and indicates areas in need of further study.

Case analysis

By far the more popular of the two approaches to researching the liability issue is what we have termed case analysis. Beginning with Rados (1969), at least a dozen articles have been published keeping the marketing discipline abreast of recent developments in the liability arena. This research is broken into topical areas and discussed in the following section.

Strict Liability. Rados (1969) and Loudenback and Goebel (1974) both focused on the impact of strict liability on managerial decision making. A very new philosophy at the time, these researchers accurately predicted the result of growing consumerism and the doctrine of strict liability on the marketing discipline. Rados (1969, p. 144) noted "More and more the discipline of the competitive marketplace is being buttressed by the discipline of the law. And these new legal forces are particularly important in the field of product liability." Rados discussed several problems facing managers in the 1970s, including (1) increased complexity of their product offering requiring greater quality control for the manufacturer and expertise on behalf of the consumer and (2) more rapidly developing and increasingly competitive markets necessitating constant innovation. These problems are exasperated by increasing consumerism accompanied by legislation and court decisions strongly favoring the consumer. According to Rados (1969, p. 148), strict liability has two meanings, one legal and the other social and economic. The legal meaning is to remove the burden of proving blame or fault from the "powerless" consumer. From a social/economic perspective, strict liability embraces the concept of risk spreading: "Strict liability embodies a belief that the cost of accidents should be passed from the few (victims) to the many (consumer) in the form of

higher prices and that the agency to accomplish this is the manufacturer" (1969, p. 148).

Rados discusses the implications arising from strict liability, then offers managers a two-step procedure for dealing with potential problems associated with strict liability. First, is the diagnostic stage. In this stage, management should conduct a safety audit to identify potentially unsafe products and safety engineers should review and revise the design and manufacturing procedures to minimize the possibility of injury. The second stage is to adopt a "systems approach" to product safety. This encompasses assigning a specific individual responsibility for the entire safety program including design, production, testing, inspection, and consumer communications (instructions, labels, advertising, etc.). Since these actions can only be expected to minimize liability exposure rather than eliminate it, Rados' final suggestion is to acquire liability insurance compatible with the firm's needs.

Perhaps even more assertive than Rados, Loudenback and Goebel (1974, p. 62) proclaimed:

> It is quite possible that marketing is at the threshold of another momentous change. The changing social and legal environment is forcing manufacturers to take greater responsibility for the goods they produce and sell. The signal for this change is the evolution and widespread acceptance of the doctrine of strict liability.

Loudenback and Goebel briefly outline the development of strict liability and suggest the emergence of the philosophy is a sign that society is no longer willing to accept the dangers associated with mass production to gain the concomitant benefits. Strict liability serves to drastically reduce manufacturer's avenues of defense in liability litigation. Furthermore, legislation such as the Consumer Product Safety Act will raise governmental safety standards and assist potential plaintiffs by providing valuable information regarding product-related injury for use in liability trials. Thus the firm, and particularly the

marketing function, will be increasingly expected to provide a wide variety of safe products while maintaining a reasonable price.

To meet these demands, Loudenback and Goebel (1974, p. 65) call for a "positive response" from marketing managers. More specifically, marketing should more carefully assess consumer safety needs and desires, accurately communicate the product's performance characteristics, educate the public regarding product safety issues, and devote greater attention to post-purchase consumer satisfaction. As a central theme, Loudenback and Goebel stress the increasing necessity of social responsibility among the business community.

These two readings introduced the marketing discipline to the doctrine of strict liability. The authors were quite prophetic in forecasting the current product liability dilemma. Several researchers have since expanded our knowledge of product liability by focusing on other aspects of the liability issue.

General Reviews. Morgan has certainly been the marketing discipline's most prolific writer on product liability issues. Two of his manuscripts (Morgan 1982; Morgan and Avrunin 1982) provide a general overview of the impact of product liability developments on the marketing discipline. Both articles define and discuss the four major theories of product liability: negligence, warranty, strict liability, and misrepresentation. By reviewing court cases, the liability consequences of marketing activities are illustrated. Morgan (1982, p. 71) reports that statements and actions of sales personnel, print and broadcast advertising, product labeling and instructions, and actions of the wholesaler and retailer have all resulted in successful product liability lawsuits. Morgan (1982, p. 76) concludes:

- Firms can be found liable under negligence and warranty due to marketing communications (i.e., salesperson comments, advertising copy, packaging and labeling).
- Even innocent misrepresentation of the facts through marketing communication can result in liability.

- Strict liability is based on product defect, therefore advertising and personal selling are generally irrelevant in strict liability action.
- Courts have interpreted "product" in a broad sense, finding inadequate labels, warnings, and packaging all capable of establishing a defective product.
- Although not generally liable for misrepresentation by the manufacturer, channel members can create liability through misrepresentation of their own.
- Furthermore, negligent action on the part of one channel member can result in liability for other members if they should have anticipated the negligent act.

Through analysis of several court cases, Morgan (1982, p. 77; Morgan and Avrunin 1982, p. 53) offers suggestions on how to deal with the liability crisis. To minimize product liability exposure, marketing managers should (1) remain informed regarding current trends in product liability litigation by monitoring court decisions and insurance settlements, (2) establish company-wide liability prevention programs with guidelines for each employee, and (3) provide consumer education regarding safe product operation through marketing communications and intra-channel cooperative efforts.

Liebermann (1984) offers another overview of the liability issue, concentrating on expected consumer response to liability legislation. Using a five stage buyer behavior model - internal/external search, attitude formation, purchase decision, product usage, and post-purchase assessment - the effects of product liability legislation are discussed. Liebermann operates on the assumption that increased safety legislation will translate into safer products and reduced consumer risk, or at least create the perception of reduced risk. As an example, Liebermann (1984, p. 57) claims "Since one of the main purposes of external search is to reduce the risk associated with certain purchases, the consumer will now tend to reduce his search activity for he believes that manufacturers comply with the product liability legislation and will supply the market with less unsafe items." One result of the shortened search process will be more rapid diffusion of new major durables

(Liebermann 1984). Furthermore, the perception of reduced risk will eliminate an evaluative criterion (product safety), blurring the distinction among brands and altering the overall attitude toward each product.

The purchase decision stage is likely to be affected in two respects (Liebermann 1984, p. 58). First, lower risk will cause consumers to be less selective in the marketplace and display lower brand loyalty. Second, reduced risk may grant additional household members (such as children) the authority to finalize purchase transactions. This inter-personal gap may separate attitude formation from purchase, thus reducing household loyalty. The next stage, product usage, will also be affected. Assuming that producers will be forced to improve overall product quality in an effort to meet more stringent safety standards, extended product usage periods and longer inter-purchase intervals will result. Finally, the post-purchase processes will be modified (Liebermann 1984, p. 59). Experiencing improved product safety may encourage consumers to generalize to other dimensions of the product, creating "exaggerated" expectations regarding product performance. Since manufacturers are likely to do only what is required to comply with the law, these increased expectations will be frustrated. The outcome may be greater cognitive dissonance and reduced overall consumer satisfaction.

Liebermann (1984, pp. 59-62) translates the changes in consumer attitudes and behavior into managerial implications. First, slower innovation and new product introduction can be expected due to the increased cost of improved product safety and greater difficulty in meeting heightened consumer expectations. Second, producers may be forced to withdraw lower-end items that cannot support the expense required to meet new safety standards. Third, a decline in overall demand will result from longer inter-purchase time intervals. Fourth, distribution channels may shorten, especially for perishable goods, to

avoid delays in moving the product from the producer to the consumer and provide greater control over the distribution process. Fifth, promotional strategy will be affected. Since brand loyalty will be reduced, the emphasis on point-of-purchase advertising will increase. Sixth, and perhaps most immediate, pricing policies will have to be adjusted to cover the increased expense of product safety and liability insurance.

Downs and Behrman also examine legal theories and product liability problems facing marketing management to create "a comprehensive, company-wide strategy designed to minimize products liability exposure" (1986, p. 58). Following an analysis of product liability legislation and the managerial consequences, the authors (1986, p. 60) conclude "From the manufacturers' and insurers' standpoints, products liability law and courtroom activity have become unfairly stilted in the plaintiff's favor, and state-by-state variations in laws and court decisions have created undue uncertainty among manufacturers and insurers concerning the range and severity of liability." Downs and Behrman (1986, p. 60) identify two movements intended to curtail the product liability problem:

(1) Amending and enacting product liability tort reform legislation. Although legislation - S-44 and S-100 among others - has been proceeding for several years, a nationwide product liability law has yet to be adopted.

(2) The establishment of product liability risk pools. These pools are intended to bring relief from high liability insurance premiums, drastic rate fluctuations, and high liability insurance deductibles. Congress has passed the risk retention act, allowing self-insurance against product liability and the purchase of product liability insurance on a group basis.

To compliment these attempts at reducing the liability burden, Downs and Behrman (1986) propose a comprehensive strategy designed to minimize the potential for liability claims and to provide the strongest defense if a suit is brought. The key player in this strategy is the

"products liability coordinator," whose primary responsibility is to coordinate product liability activities with groups within and outside the firm. Internally, this task involves reviewing engineering and product testing data, insuring promotional material accurately portrays the product, checking the adequacy of product instructions and warnings, and maintaining quality control standards during the manufacturing process. Externally, the products liability coordinator should monitor and predict developments in the end-use environment, establish communication and provide information to distributors, obtain insurance and maintain a positive working relationship with the insurance provider, take the role of lobbyist in behalf of tort reform legislation, operate as the liaison between the firm and actors in the judicial process, and implement a product safety consumer education program. From this description, Downs and Behrman's *products liability coordinator* is analogous to the *systems approach* to product safety advanced by Rados (1969).

These general readings provide a managerial primer on product liability from a case analysis perspective. They introduce the reader to product liability legal theories and terms and discuss landmark cases relevant to the marketing discipline. From our review of this research, we can see the liability issue affects a wide variety of marketing decisions.

Market Share Liability. Sheffet (1983) and Boedecker and Morgan (1986) have both discussed the consequences of the doctrine of market share liability to the marketing discipline. Market share liability is the most recent development in joint liability litigation. Market share liability is particularly noteworthy because "this doctrine removes the requirement, previously essential in any type of product liability action, that a plaintiff show a specific product was a direct cause of the injury" (Sheffet 1983, p. 35).

Market share liability is a form of joint tort liability where multiple producers of a product are tried as defendants in a single suit. Established in the case of *Sindell v. Abbott Laboratories, Incorporated* (1980), market share liability enables a plaintiff to recover damages when (Boedecker and Morgan 1986, p. 76): (1) the plaintiff's injury arose from a defectively designed product marketed by an unknown producer; (2) the inability to identify the specific manufacturer is due to no fault of the plaintiff; (3) all manufacturers in the industry produced the same product with the same defect; and (4) the defendants named in the suit accounted for "a substantial share of the market." In establishing market share liability, the court stated:

> Each defendant will be held liable for the proportion of the judgement represented by its share of that market unless it demonstrates that it could not have made the product which caused plaintiffs injuries. . .Under this approach, each manufacturer's liability would approximate its responsibility for the injuries caused by its own products. (*Sindell* 1980, p. 612)

Two practical problems pertinent to the marketing discipline are raised by this ruling: First, what defines the "market" and second, how will "market share" be measured? Alternative methods of defining markets and measuring market share have been debated in the marketing literature (Kotler 1971; Day, Shocker, and Srivastave 1979). While aware of the difficulty of delineating the "market" and determining market share, the court failed to establish any guidelines to assist in doing so. For instance, it did not specify if the market should consist of only the state where the litigation occurred or whether national or international sales should be considered (Sheffet 1983; Boedecker and Morgan 1986). Similarly, what time period should be used to calculate market share (Boedecker and Morgan 1986)? Each manufacturer's share of the market likely varied during the production of DES, and some firms only produced the drug a limited number of years. Furthermore, DES had been sold as a prescription drug for a variety of uses, only one of which was relevant to Sindell's case. In this particular case the court

ruled that all other uses of the drug should not be considered in establishing market share.

In essence, market share liability presumes a manufacturer guilty until proven innocent (Sheffet 1983, p.41). The only method of doing so is for the defendant to establish that they could not possibly have produced the product causing the injury. In *Sindell*, the defendants claimed that sales of the product had taken place over a thirty year period. In addition, records did not allow the determination of what percentage of DES each manufacturer had produced was used as a miscarriage preventative (Sheffet 1983, p. 40; Boedecker and Morgan 1986, p. 77). Nonetheless, without appropriate records, a manufacturer can be held responsible for damages in excess of their true liability. To the marketing manager this means more detailed sales records must be maintained for a longer period of time (Sheffet 1983). To guard against market share liability, a manufacturer must be able to prove where, when, how much, and for what purpose a particular sale was made.

Branding strategy may also be affected by market share liability (Sheffet 1983). For example, in the case of a branded drug pharmacy records may indicate the actual producer of the product in question. On the other hand, firms offering generic drugs may find it very difficult to establish that their product did not cause the harm. Thus market share liability brings into question the viability of generic goods as low-cost alternatives to branded products.

Extending liability to injuries occurring a generation after product use has managerial implications as well (Boedecker and Morgan 1986). A likely response is that more elaborate and expensive testing over a longer time period will be conducted. This testing will not only increase product costs, but delay the introduction of newly developed products.

As Sheffet and Boedecker and Morgan point out, the doctrine of market share liability holds numerous implications for the marketing

discipline. Without a doubt, market share liability has horizontally extended the potential liability of manufacturers and distributors in several industries (i.e. pharmaceutical products, leaded paint, aluminum wiring, insulation, etc.) and increased the responsibility of the marketing manager in guarding against liability litigation.

So far, each of the articles discussed has taken a relatively broad view toward the product liability issue. Different philosophies of product liability and various court cases were discussed and analyzed as they related to the business community at large and the marketing discipline as a whole. Alternatively, research has focused on the impact of product liability on more specific aspects and functions of the marketing discipline. A review of these articles follows.

Marketing Channels. The relationship between product liability and two elements of the distribution function have been investigated in the marketing literature. Adams and Bennett-Alexander (1985) reviewed the proposed Product Liability Act (S-100) and evaluated how the Act would affect the liability exposure of retail institutes. Morgan (1987) examined the outcome of court cases and liability statutes to assess franchisor liability.

Adams and Bennett-Alexander (1985, p. 60) point out "Each state has, historically, addressed product liability issues on an essentially local basis; at present, there is no uniform product liability law or code." Under current practices, a retailer can be found liable when a consumer experiences physical injury even though the retailer had no direct role in design and/or manufacture of the product. Five "theories" have been offered as explanation for the inclusion of retailers in liability litigation (Leete 1982; see Adams and Bennett-Alexander 1985, p. 61):

(1) *Availability or access.* It is possible the retailer provides the only recompense available to the consumer. In addition, branding practices such as private labeling may make it difficult to differentiate between the manufacturer and retailer.

(2) *Economic benefit.* Since liability is one outcome of economic gain, and retailers enjoy economic benefits from the sale of products, retailers should absorb their share of liability costs.

(3) *Risk spreading.* Retailers are in a better position than the injured party to distribute the expense of liability suits.

(4) *Pressure theory.* Imposing stringent liability standards on retailers should force them to exert pressure on members upstream, ultimately resulting in safer products for everyone.

(5) *Indemnity theory.* Retailers are always free to file a subsequent suit against a channel intermediary or the manufacture, if that is where true liability lies.

Section Eight of S-100 attempts to clearly establish the parameters of reseller liability. Under the Act, retailer liability would be restricted to those circumstances where (1) the manufacturer cannot be brought to trial (i.e. a foreign producer); (2) the retailer is directly involved in the production process and cannot be distinguished from the manufacturer; (3) retailer negligence in servicing the product is the cause of the injury; (4) the retailer fails to provide necessary product information to the consumer which leads to the injury; and/or (5) the retailer provides an express warranty separate from that of the manufacturer (see Adams and Bennett-Alexander 1985, p. 61). While the Act would reduce retailer exposure to liability litigation, it is clear the intent is not to alleviate all responsibility. Instead the objective is to hold the retailer liable only when they are, in fact, responsible or when the retailer provides the consumer his/her only course of redress (Adams and Bennett-Alexander 1985).

Adams and Bennett-Alexander (1985, p. 61) pointed out that retailers can "be held responsible for damages in a product liability action even though the retailer played no direct role in the design and/or manufacture of the product in question." According to Morgan (1987, p. 129), liability for franchisors goes one step further: "The most recent extension of product liability within the distribution channel involves franchisors who have neither designed, manufactured, nor sold the product which harmed their franchisees' patrons." Morgan's review of court cases provides some insight into those situations where a non-manufacturing franchisor may be held liable.

Kosters v. Seven-Up (1979) is a landmark case in franchisor liability (see Morgan 1987, p. 131). In *Kosters*, a franchisor (Seven-Up Bottling Co.) was found strictly liable for breach of implied warranty. Seven-Up received royalty payments from the franchisee and reserved the right to inspect and approve the franchisee's bottles, cartons, and advertisements. Seven-Up argued that they had neither control over nor responsibility for the franchisee's actions and retained inspection rights only to insure proper display of its trademark. The jury rejected the defendant's arguments and found for the plaintiff. The finding seriously eroded franchisors' ability to assign liability for faulty products to other channel members. The court identified four factors which combine to create franchisor liability (*Kosters* 1979, p. 353):

(1) Franchisor approval for distribution of an unsafe product likely to cause harm created risk for the consumer;

(2) The franchisor held the ability and opportunity to prevent the loss by eliminating the unsafe character of the product;

(3) The consumer was unaware of the danger of the product; and

(4) In purchasing the product, the consumer relied on the franchisor's trade name, giving the impression the franchisor stood behind and was responsible for the product.

The decision rendered in *Kosters* and several other cases lead Morgan (1987, p. 136) to conclude "the franchisor will be exposed to increasing liability when consumers are hurt by products or services obtained from members of the franchisor's distributive network." Most importantly, even those firms not involved in the design or manufacture of a product, but who allow their name to be attached to goods or services offered by others, face greater liability exposure today than ever before. To minimize this exposure, franchisors are encouraged to control the quality of any products bearing their name, detect and halt any misleading or deceptive uses of their trademark by the franchisee, and ensure product uniformity (Morgan 1987, p. 138). The key concern is to guard against obviously liable conduct without interfering with the day-to-day operation of the franchisee.

Unfortunately for the retailer, S-100 (like S-44 before it) failed to become law. Although Adams and Bennett-Alexander examined S-100 exclusively as it related to retailers, the Act actually would have affected the marketing discipline in numerous areas and the liability dilemma in its entirety. Adams and Bennett-Alexander's work can be looked at as "what might have been," while Morgan's (1987) research on franchisors tells us "how it is" in channel member liability.

Marketing Communication. Morgan discusses the implications of product liability litigation on two forms of marketing communication, the advertising function (Morgan 1979) and personal selling (Morgan and Boedecker 1980-81). Surveying a number of court cases, eight areas are identified where advertising can potentially lead to liability (Morgan 1979, p. 31). First, advertisements have been found to establish an *express warranty* for a variety of products, including water pipes, automobiles, herbicides, deodorants, scaffolding, and cigarettes. For this to occur, an advertisement must have made a claim and the plaintiff must demonstrate reliance on that claim in the purchase and use of the product. To protect the firm from liability exposure associated with

express warranty, managers must be certain that claims about a product's capabilities do not express greater performance than the producer wishes to guarantee. Second, advertisements can give rise to *implied warranty*, which indicates that a product is suitable for a particular purpose. From the manufacturer's perspective, little can be done to guard against implied warranty liability. Third, advertisements can form an actionable *negligent act* by violating the duty to use care. For instance, advertisements which depict a product as "totally safe" or "absolutely harmless" can be considered negligent if a relatively harmless item is treated with less care due to the advertised claims. That is, an advertisement could be judged negligent if it creates a false sense of security regarding the safety of the product.

The fourth area arises when an advertisement results in a *traverse warning* - one which is disregarded or not noticed. Over-promotion of a product can overwhelm otherwise adequate warnings and result in liability. To protect against traverse warnings, the firm must be careful that promotional activities do not detract from the required safety warnings. Fifth, advertisements can be a fraudulent misrepresentation of fact. In the case of *Norway v. Root* (1961), today's widely held view regarding fraudulent advertising was first articulated:

> We have indicated a willingness to hold dealers or manufacturers responsible for the claims they make in their advertising, which are untrue or misleading and cause damage to purchasers who relied on them.

Thus a firm must strictly enforce truth in advertising to avoid liability due to fraudulent advertising.

Sixth, liability can result from accidental misrepresentation of fact. Although similar to fraudulent and negligent advertising, accidental misrepresentation occurs when an advertisement offered honestly turns out to be false. Accidental misrepresentation can be minimized by insuring advertisements do not create the impression that unforeseen dangers do not exist. The seventh setting is when

advertisements lead to strict liability. Theoretically this scenario occurs when an advertising campaign results in higher consumer expectations. Ultimately, these expectations become the standard of safety demanded for the product. The eighth and final area occurs when an advertisement violates a legal statute. Statutory violations can be avoided by having legal counsel review marketing communications and insuring their compliance with regulations.

Morgan applied the same approach to studying liability in a second area of marketing communication, the field of personal selling (Morgan and Boedecker 1980-81). A review of case law revealed several areas where salesperson representations of the product can result in company liability for consumers' injuries. Three doctrines have been used as the basis for legal action when salespersons' activities were questioned: warranty, misrepresentation, and negligence.

Statements made by salespersons have been found to establish express warranty even if the seller has no intention of doing so. These statements are considered promises of product performance which can form the basis for liability suits. According to Morgan and Boedecker (1980-81, p. 35), "a plaintiff who seeks to recover damages under an express warranty theory must establish that the seller made affirmations of fact or promises that related to the goods, that such representations became part of the basis of the bargain, that a failure of the goods to perform as thereby warranted constituted a breach of the sales agreement, and that damages resulted."

In the same manner, salespeople can create liability in misrepresentation for a firm by innocently misrepresenting a product. The legal basis for such action is found in Section 402B of the *Restatement (Second) of Torts* (1965):

> One engaged in the business of selling chattels who, by advertising, labels, or otherwise, makes to the public a misrepresentation of a material fact concerning the character or quality of a chattel sold by him is subject to liability for physical harm to a consumer of the chattel caused by justifiable reliance upon misrepresentation, even though
>
> (a) it is not made fraudulently or negligently, and
>
> (b) the consumer has not bought the chattel from or entered into any contractual relation with the seller.

Liability suits have been brought under negligence when the salesperson failed to exercise reasonable care in representing the product. More specifically, "sales personnel must act reasonably with respect to the representations which they make about products, instructions for proper use, inspection and testing of the items which they sell, and warnings about dangers not obvious to the expected user" (Morgan and Boedecker 1980-81, p. 37). To protect the firm, the sales staff must exercise a reasonable level of caution to guard against over promoting the product.

Although warranty and negligence appear to be nearly identical, a technical difference exists. Warranty is considered contract law, which includes only the immediate seller and immediate buyer. On the other hand, negligence comes under the rule of strict liability in tort and is limited to misrepresentations made to the public at large.

Through his research, Morgan has shown that a firm can be held liable due to characteristics of the extended product. Marketing management should be aware of each of the areas of potential liability arising from product advertising and personal selling. In general, insuring honesty in advertising and training the salesforce and monitoring their claims will go a long way toward alleviating the risk of liability due to marketing communication.

Morgan has chosen to rely entirely on case analysis and legal statutes to illustrate liability arising from marketing communications.

However, an important factor in determining these cases is the perception of the particular jury. For example, the distinction between "puffing" and expressed warranty is critical. However, since no totally objective measure is available to differentiate puffing from liable actions, it typically comes down to "a jury question whether or not a particular advertisement conveys an express warranty or is simply 'puffery'" (Morgan 1979, p. 31). Likewise, what constitutes an implied warranty or misrepresentation must be determined by the jury. Establishing negligence relies on jury interpretation as well. For example, the "reasonableness" criterion is "one to be applied by a jury in light of the available evidence" (Morgan and Boedecker 1980-81, p. 37). The importance of jury decisions, and the human aspect of liability in general, have led other researchers to take more of a behavioral perspective in investigating product liability.

Behavioral Research

We have labeled the second approach to studying the liability issue the behavioral method. Researchers using this approach have: (1) surveyed various constituencies to determine their attitude toward the Consumer Product Safety Commission (CPSC) and its safety regulations (Busch 1976; Busch and Hair 1980; Dudley, Dudley, and Phelps 1987); (2) discussed the role of consumer/jurors in pretesting marketing decisions (Gelb and Cheney 1986); and (3) developed and tested behavioral models of the liability trial process (Mowen 1983; Darden, DeConinck, Babin, and Griffin 1991). This research focuses on the human element of the liability process in contrast to the true legal orientation of the case analysis approach. We believe this perspective offers potentially richer information than does case analysis, and is the approach taken in the current study.

Consumer Product Safety Commission. The CPSC is the most powerful and influential government agency involved in the safety of consumer goods.

Created by the Consumer Product Safety Act (1972), the CPSC is responsible for establishing and enforcing safety standards of approximately 15,000 consumer products (Dudley et al. 1987). Marketing researchers have surveyed product manufacturers, insurance providers, public officials, and consumers to determine their perceptions of the CPSC.

In the only study involving multiple constituencies, Busch and Hair (1980) compared and contrasted attitudes of manufacturing executives, insurance executives, and state insurance commissions regarding the CPSC, product safety, the role of the salesforce in product safety, and the doctrine of strict liability. In most of these areas, a substantial amount of agreement was found to exist across the three groups (Busch and Hair 1980, pp. 488-93). All three agreed that: (1) safer products are being produced, but at a higher price; (2) the salesforce is *potentially* valuable - and should be trained - in evaluating product safety problems; (3) a good safety record provides a manufacturer with a competitive advantage; (4) small businesses have greater difficulty obtaining liability insurance than large firms, but should not receive preferential treatment in liability suits; and (5) overall, the CPSC was viewed as successfully protecting the consumer from unsafe products.

Conversely, the doctrine of strict liability received a mixed reaction from the three groups. As might be expected, the segment representing public policy - the insurance commissions - displayed a relatively more favorable attitude toward the doctrine of strict liability (Busch and Hair 1980, p.489). When compared to insurance commissions, manufacturers and insurance providers felt strict liability *had not* improved product safety; but *had* led to higher prices, obstructed product innovation, slowed new product introduction, and placed an unreasonable financial burden on manufacturers. In addition, 80% of the manufacturers reported that their firm had designated "an

individual with the authority, responsibility and accountability for the safety of the products" they produced (Busch and Hair 1980, p. 495). This position appears to coincide with the *products liability coordinator* depicted by Downs and Behrman (1986) and Rados' (1969) *systems approach.*

Dudley, Dudley, and Phelps (1987) also discovered favorable attitudes toward the CPSC. Assessing consumer reactions to the CPSC and recently mandated lawn mower safety features, Dudley et al. report that the vast majority of users have not circumvented three safety features - the rear protective flap, grass-discharge chute shield, and the deadman's control. The authors contend that if these features were "considered a nuisance" by the users, they would have removed or defeated. Dudley et al. (1987, p. 187) conclude "Clearly consumers have accepted the three safety devices."

Overall, it appears that the Consumer Product Safety Commission and mandated product safety features are being well received. Certainly everyone has a stake in insuring product safety. All the constituents surveyed, public and private, producer and consumer, evaluated the CPSC and the corresponding product safety devices favorably in achieving this goal. The ability of the doctrine of strict liability to guarantee product safety, however, is not universally acknowledged.

Consumers as Jurors. Three marketing articles have focused on consumers serving as jurors in the liability process. Gelb and Cheney (1986) note that one of the major problems for marketing managers and society at large is to determine what actions actually are illegal and evoke liability. In other words, "what a jury would find if a given marketing action were to be challenged in court" (Gelb and Cheney 1986, p. 97). Since up to 90 percent of product liability cases are tried by juries, the authors suggest "pre-testing" juror attitudes toward the marketing actions being contemplated to determine what would be judged an illegal act.

Gelb and Cheney point out that marketing research is utilized in a wide variety of situations to determine consumer perceptions and reactions prior to implementing a course of action. Applying the same proven research techniques to legal issues can provide decision makers before-the-fact guidance on crucial issues. Jury research in other disciplines fruitfully applies techniques including focus groups, opinion surveys, mock trials, to study juror reaction, and "the increasing popularity of these techniques suggests a prevalent belief that people can think like jurors even though they are not empaneled (Gelb and Cheney, p. 99). In particular, Gelb and Cheney recommend the use of focus groups to determine the legal consequences of the proposals being contemplated. One benefit from pre-testing approach is the elimination of those actions deemed illegal. In addition, if the company does find itself in court, the firm can claim that "people like you were consulted before we took this action. They said we were in the right" (Gelb and Cheney 1987, p. 103). In addition, the consumer gains the opportunity to have a more timely and specific voice in marketing decision making.

Mowen (1983) and Darden et al. (1991) also look at the dual role of consumer and juror. Of the product liability research appearing in the marketing literature, these two manuscripts most closely parallel the present study. Mowen uses a communications perspective to develop his behavioral model of the liability litigation process (see Figure 2.1). This model views the liability trial as an attempt by the plaintiff and defense attorneys to communicate with and persuade the jury. Unfortunately, while a major conceptual advancement, the model is not presented in an empirically testable form.

Of particular relevance to this study, and central to his model, are what Mowen (1983, p. 103) terms *source effects*: "Source effects relevant to the civil trial include the effects of socioeconomic status, physical attractiveness, likability, and other personal characteristics

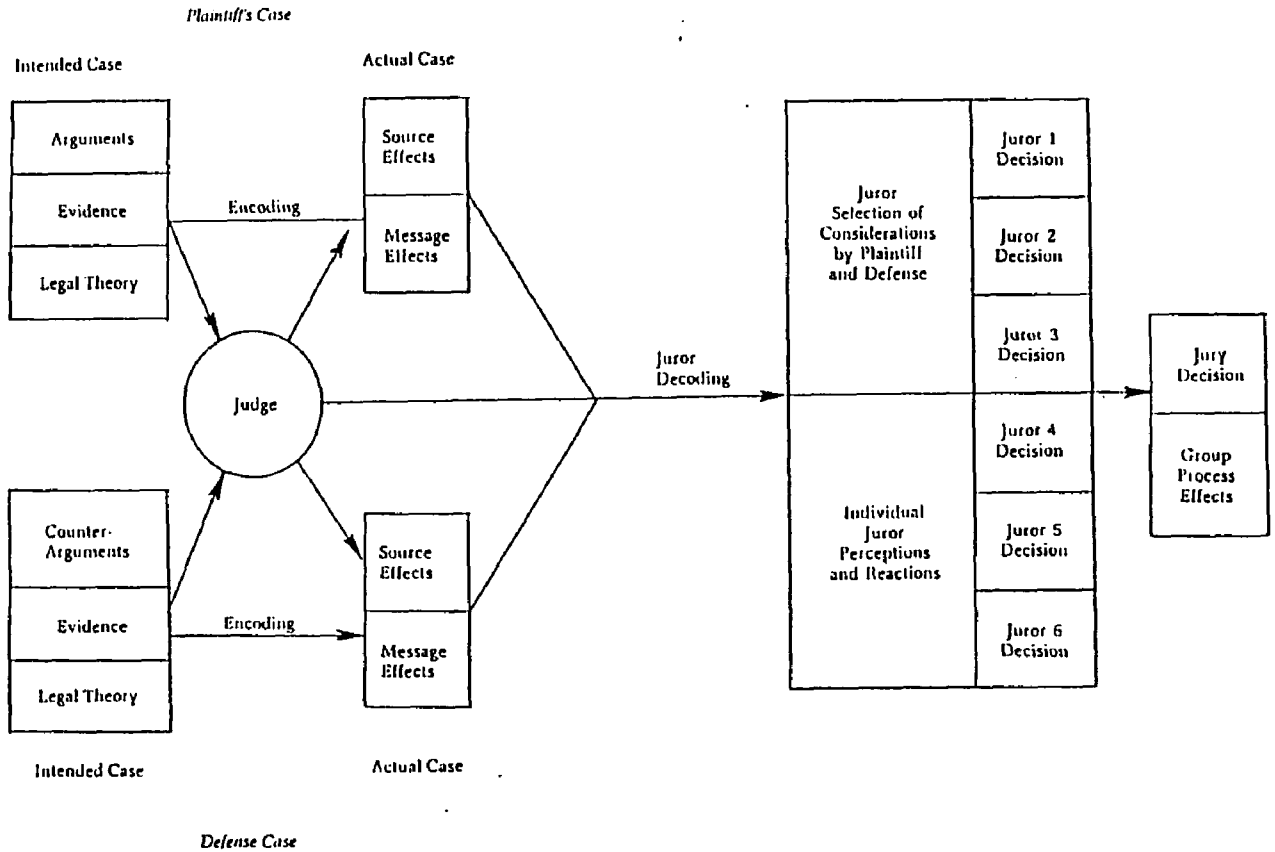

Figure 2.1

Mowen's Model of the Civil Trial Process

of the defendant, plaintiff, lawyers, and witnesses." Although relatively sparse, previous research on the topic has indicated source effects have a substantial impact in civil trials. Mowen (1983, p. 104) calls for further research to isolate additional source effects. Particular attention should be placed on identifying factors influencing juror perceptions of the credibility of the judicial actors. Mowen (1983, p. 118) also poses a more specific question for future research: "are [juror] demographic and personality characteristics systematically related to jury awards?" The present study addresses these issues by (1) manipulating characteristics of the defendant and (2) investigating how juror individual difference variables affect their perception of the plaintiff and defendant.

While cognizant of the group decision-making aspect of jury trials, Mowen's model "views the jury decision in a civil trial as an amalgam of the individual jurors' decisions" and "proposes that by knowing the individual decisions of the jurors prior to entering deliberation, one can accurately predict the final jury verdict" (Mowen 1983, p. 103). There is ample support for this position based on prior research. First, research has found that jurors tend to form their opinion regarding the verdict in the case prior to deliberation. For instance, Weld and Roff (1938) discovered that mock jurors had reached their final decision before even hearing all of the evidence. Kalven and Zeisel (1966) report that with very few exceptions the verdict is determined on the first ballot, thus indicating the actual decision is made prior to deliberation. In addition, there is evidence that a jury verdict can be predicted from the individual juror's predeliberation opinions. Simon (1980) reported that polling individual jurors prior to deliberation would enable one to predict the final jury verdict in 80% of the cases. Mowen and Ellis (1982) also found a high correlation between individual juror decisions and jury verdict. Based on this evidence, and to determine the impact of individual difference

variables, the current research also focuses on decision process of the individual juror.

Darden, DeConinck, Babin, and Griffin (1991) also developed a behavioral model of the product liability process and empirically tested it. In an experimental design with written protocols, Darden et al. manipulated personal characteristics of the plaintiff (age, financial status, and type of injury) and the defendant firm's financial status, while income and personal values (Rokeach terminal values) of the juror were measured as covariates. These factors significantly predicted jury award and a mediating variable, sympathy toward the defendant. The empirical evidence of affective response as a mediator between causal antecedents and jury award is an important theoretical contribution.

Darden et al. discuss the concept of *loose coupling* (Thomas 1983), or slippage between the actual facts of the case and jury verdict in the civil liability trial. They argue that material facts and legal policy are commingled with affective considerations to arrive at a court decision. This position is succinctly articulated by Hoffman and Brodley (1952, p. 235-7) and epitomizes what is meant by the behavioral element of the product liability process:

> ...jurors discard the legal rules and the evidence to bring in a verdict out of their own heads or hearts...the jury does not understand the legal rules involved in the many cases and does not apply them.

Juror sympathy toward the plaintiff is incorporated in the Darden et al. model to capture loose coupling. The empirical results show that sympathy accounts for a greater proportion of the variance in jury award than any of the material facts (experimental manipulations) of the case. If sympathy plays such an important role in the relatively sterile environment of this study, it is likely that sympathy, and other affective considerations, have at least as significant impact in the actual trial setting. Therefore, this study includes sympathy toward the plaintiff (considered positive affect), as well as measures of

negative affect toward the plaintiff and positive and negative affect toward the defendant.

Darden, DeConinck, Babin, and Griffin (1991) illustrate several factors pertinent to the current study. First, the study provides evidence (along with several studies in the psychology literature) that experimental manipulation of civil trial elements can be effectively accomplished through written scenarios. Second, discovering the significance of the two consumer/juror variables, as posited by Mowen (1983), suggests that other juror individual difference variables may be systematically related to jury awards. Third, the significance of sympathy as a mediating variable indicates affect plays an important role in civil trials.

Summary

A review of the marketing literature uncovered several articles investigating various aspects of product liability. Product liability legislation and litigation are a major concern to the business community and marketing discipline, thus the attention product liability has received should not come as a surprise. This study seeks to extend the present knowledge base and provide a better understanding of the liability process to help marketing managers reduce their exposure to liability litigation.

The majority of the research reviewed took a case analysis approach; discussing legal philosophy and interpreting court cases as they relate to the marketing discipline. This knowledge is necessary to understand the legal environment and illustrates caveats for the marketing practitioner. The alternative approach concentrated on the behavioral component of the liability process; investigating the attitudes and opinions of various constituents and the role of the unique characteristics of jurors, plaintiffs, and defendants in liability litigation. While building on information gleaned by case analysis, the current study utilizes the behavioral approach to examine

the product liability dilemma. The literature revealed a number of factors that support and direct this research:

- While certainly not ubiquitous, product liability studies are well represented in the literature and appear to have emerged as a legitimate field of research for marketing academicians.
- *Product* has been interpreted by the courts in a broad sense; inadequate labelling, warnings, and/or packaging can result in a product being judged defective.
- Intrinsic characteristics can result in a product being considered inherently dangerous.
- Promotional activities can invoke product liability. In particular, advertising and personal selling have resulted in liability under the doctrines of warranty and negligence.
- Interpreting the law and determining liability is a subjective process. For example, what comprises an implied warranty or negligent action must be determined by the jury.
- Negligent actions of one channel member can invoke liability for other members of the channel as well.
- Higher safety standards and additional safety devices are generally desired and accepted by the consumer.
- Individuals can respond as jurors even though they are not empaneled.
- Jury verdicts can be predicted by compiling the opinions of the individual jurors.
- *Source effects*, or personal characteristics of the plaintiff and defendant, can influence how they are perceived by the juror. Likewise, demographic and personality characteristics of the individual juror can affect their perceptions of the other judicial actors.
- Sympathy for the defendant has been shown to be a mediator between causal antecedents and juror award.
- Material facts of a liability case have been successfully manipulated through the use of written scenarios.

Theoretical Foundation

As stated previously, the proposed relationships in the research model are largely based on attribution theory. Other theories however, provide important conceptual support for the study as well. This section presents a general introduction to prospect, disconfirmation, and attribution theories and discusses the contribution of each to the present study.

Prospect Theory

The expected utility model is the most widely accepted theory of decision making (Tversky and Kahneman 1981, p. 453). This model proposes that the utility of any choice is calculated by weighting the potential value of each outcome by its probability of occurrence to determine the expected value. The decision-maker is then assumed a "rational man" selecting that outcome offering the highest expected utility (see Raiffa 1968; Fishburn 1970). Observation of risky decision-making, however, reveals that individuals often display preference patterns inconsistent with expected utility theory. To accommodate these discrepancies, Kahneman and Tversky (1979) have developed a modified version of expected utility theory.

Prospect theory is the name given by Kahneman and Tversky (1979) to their conceptual model of decision-making. Prospect theory differentiates choices made in "riskless" contexts from those made in "risky" situations. An example of decision-making under risk is "a gamble that yields monetary outcomes with specific probabilities" (Kahneman and Tversky 1984, p. 341). Conversely, "a typical riskless decision concerns the acceptability of a transaction in which a good or service is exchanged for money or labor" (Kahneman and Tversky 1984, p. 341). Certainly the vast majority of marketing research has focused on transactions exchanging money for a good or service -- "a typical riskless decision."

Kahneman and Tversky (1984) base their model of risky decision making on the work of Daniel Bernoulli (see Bernoulli 1954). Bernoulli offers an explanation as to why individuals tend to be risk averse and why risk aversion decreases as wealth increases. Risk aversion is operationalized as a preference for a sure thing over a gamble with equal or higher expected value. Kahneman and Tversky (1984, p.341) provide an illustration of this construct:

> . . .consider the choice between a prospect that offers an 85% chance to win $1000 (with a 15% chance to win nothing) and the alternative of receiving $800 for sure. A large majority of people prefer the sure thing over the gamble, although the gamble has higher (mathematical) expectation. . .preference for the sure thing is an instance of risk aversion.

According to Bernoulli, risk aversion exists because individuals do not objectively evaluate such choices solely on the expected monetary value, but rather on the subjective value of each alternative. In other words, risky decisions are often based on relative, as opposed to absolute, value judgments. For example, the difference between the utilities of $100 and $200 is perceived as being greater than between $1100 and $1200. Thus the value function of gains is concave. The same sort of relationship exists among losses. The subjective value of the difference between a loss of $100 and a loss of $200 is greater than the subjective difference between losses of $1100 and $1200, resulting in a convex value function (Kahneman and Tversky 1984, p. 342).

Prospect theory expresses the outcomes of risky propositions as "positive or negative deviations (gains or losses) from a neutral reference outcome, which is assigned a value of zero" (Tversky and Kahneman 1981, p. 454). Combining the concave value function of gains with the convex value function of losses produces a hypothetical S-shaped value function. Furthermore, Tversky and Kahneman (1981, p. 454) propose an individual's "response to losses is more extreme than the response to gains" and that "the displeasure associated with losing a sum of money is generally greater than the pleasure associated with

winning the same amount." The properties of the prospect theory value function have been well substantiated in several contexts (Payne, Laughhunn, and Crum 1980; Eraker and Sox 1981; Fischoff 1983).

Prospect theory goes further by suggesting that the method used to frame risky choices can influence individuals to be either risk averse or risk seeking. *Framing* is the manner in which the decision maker perceives the particular choice at hand. Tversky and Kahneman (1981, p. 453; also see Tversky and Kahneman 1981, p. 454-5 and Kahneman and Tversky 1984, p. 343-5) provide several illustrations of how framing affects the selection of the alternative (see Exhibit 2.2). In the example provide in Exhibit 2.2, as in all their problems, a clear majority of respondents display risk aversion when the prospects are framed as gains (i.e. a monetary gain or saving of lives), but are risk seeking when the same prospects with equivalent mathematical expected values are framed as losses (i.e. a monetary loss or number of deaths).

The basic concepts of prospect theory have been applied to problems quite relevant to the marketing discipline. For example, Thaler (1980) discusses the debate regarding a proposal to assess customers the cost of credit card processing for gasoline purchases. Lobbyists for the credit card industry insisted that the price differential be termed a discount for cash as opposed to a premium for use of credit. Essentially the credit card price was established as the "reference price" or neutral point. This resulted in a cash purchase being perceived as a monetary gain, as opposed to a credit purchase perceived as a monetary loss. Since prospect theory assumes the response to losses is more severe than the response to gains, consumers are expected to be more willing to forego a discount than accept a surcharge. As we can see, the credit card industry was persuasive in its argument and we have seen the credit card price established as the reference point in most situations.

Exhibit 2.2

Prospect Theory and the Framing of Risky Choices

Problem 1 [N = 152]:

Imagine that the U.S. is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimate of the consequences of the programs are as follows:

If Program A is adopted, 200 people will be saved.
If Program B is adopted, there is 1/3 probability that 600 people will be saved, and 2/3 probability that no people will be saved.

Which of the two programs do you favor?

A second group of respondents was given the same cover story as Problem 1 with a different formulation of the alternative programs, as follows:

Problem 2 [N = 155]:

If Program C is adopted 400 people will die.
If Program D is adopted there is a 1/3 probability that nobody will die, and 2/3 probability that 600 people will die.

Which of the two programs do you favor?

Respondents presented with Programs A and B in Problem 1 preferred Program A over Program B by a margin of 72 percent to 28 percent.

Respondents presented with Programs C and D in Problem 2 preferred Program D over Program C by a margin of 78 percent to 22 percent.

Summary

Certainly this is a cursory review of prospect theory, yet the implications for the present study, and research in the area of product liability in general, are substantial. Kahneman and Tversky illustrate that seemingly minor changes in the presentation of decision alternatives can have a pronounced effect on the decision-maker's choice process. Prospect theory offers an explanation for these inconsistencies. First, the non-linearity of the value function and extreme reaction to negative events makes losses and gains difficult to compare. Second, the manner in which the problem is framed has a large effect on the decision-maker's perception of the alternatives. For this study, prospect theory offers several important insights:

- Most consumer decisions relevant to the marketing discipline can be considered "riskless" decisions. In fact, the "typical" marketing exchange is provided as the example of the "typical" riskless decision.
- The current research, on the other hand, investigates a "risky" situation, such as a consumer contemplating the purchase of a potentially harmful product, or the manufacturer evaluating a safety device intended to prevent product-related injury.
- Individual differences in risk aversion will affect the evaluation of risky decisions.
- Marketing research studies have traditionally focused on choice decisions framed as gains. For example, the evaluation of product attributes in an attempt to determine consumer attitudes or purchase intention, or the assessment of consumer satisfaction with services, are essentially framed as a gain (or benefit).
- Investigation of a product-related injury and the resulting product liability lawsuit should be recognized as being framed in the realm of losses.
- Consumer assessment of the extended product may differ between positive (gains) and negative (losses) oriented situations.

Disconfirmation Theory and Unanticipated Consequences

The research model includes a construct termed *unanticipated consequences*, which combines the concepts of prospect theory with a popular model of consumer satisfaction, disconfirmation theory. In the past two decades, a great deal of academic research has investigated the area of consumer satisfaction/dissatisfaction (CS/D). According to Churchill and Surprenant (1982, pp. 491-92):

> The vast majority of these studies have used some variant of the disconfirmation paradigm which holds that satisfaction is related to the size and direction of the disconfirmation experience, where disconfirmation is related to the person's initial expectations. More specifically, an individual's expectations are: (1) confirmed when a product performs as expected, (2) negatively disconfirmed when the product performs more poorly than expected, and (3) positively disconfirmed when the product performs better than expected.

The consumer experiences satisfaction when prior expectations are met (confirmed) or exceeded (positively disconfirmed) by the perceived product performance. If the perceived performance fails to meet expectations (negatively disconfirmed) dissatisfaction results. Thus the disconfirmation model is comprised of (1) prior expectations of the product's performance (expectations), (2) evaluation of the actual performance of the product (performance), (3) a comparison between the prior expectations and perceived product performance (disconfirmation), and (4) the outcome or cognitive and affective state resulting from the product usage experience (satisfaction). Each of these concepts and how they relate to constructs in the current research are discussed below.

Expectations. In the typical CS/D study, expectations represent the anticipated level of the product's performance (Churchill and Surprenant 1982). Miller (1977) differentiates four types of expectations:

> (1) *Minimum tolerable* expectations reflect the lowest acceptable level of performance. Using a conjunctive decision rule (Bettman 1979), any good or service not meeting the *minimum tolerable* expectation level would be considered unacceptable and eliminated from purchase consideration.

(2) *Expected* expectations can be thought of as the consumer's "best guess" of actual performance or the perception of "average" product performance (Miller 1977). Therefore, *expected* performance is the most likely performance.

(3) *Deserved* or *equitable* (Tse and Wilton 1988) expectations are based on the concepts of equity theory (Adams 1963). *Deserved* performance is the output or benefit that "should" be received based on the consumer's inputs (i.e. financial investment) (Miller 1977).

(4) *Ideal* expectations reflect "the optimal product performance a consumer ideally would hope for" (Tse and Wilton 1988, p. 205). Thus *ideal* expectations represent the highest anticipated level of performance.

The various types of expectations provide subjective standards for the consumer to evaluate performance. From the work of Miller (1977) and Tse and Wilton (1988), it appears that expectations are formed on somewhat of a continuum from *minimum tolerable* to *ideal*. Most studies of consumer satisfaction, however, have operationalized expectations as *expected* performance (Tse and Wilton 1988).

In this study the role of expectations is slightly different than the typical satisfaction investigation. First, the expectations relevant to this study are expectations of product safety rather than actual product performance. We propose that a product can perform extremely well on several different dimensions, yet still result in injury to the consumer. In addition, we believe consumers form safety expectations on a continuum (i.e. from minimum tolerable to ideal) very similar to performance expectations. Second, rather than focusing on expectations of the actor, the expectations studied are those of the observer. When serving as a juror in a product liability trial, or being exposed to a product mishap through the media, an observer tends to draw inferences regarding those involved. In this study, respondent's perceptions of the product user's safety expectations are the relevant measure.

Finally, the method of influencing and measuring expectations is different. Previous studies directly manipulated expectations as an experimental factor (e.g. Olshavsky and Miller 1972; Olson and Dover 1976; LaTour and Peat 1980; Churchill and Surprenant 1982; Tse and Wilton 1988), treated expectations as exogenous variables and measured them without concern for their antecedents (e.g. Oliver 1980; Oliver and Linda 1981; Swan and Martin 1981; Oliver and Bearden 1983; Prakash and Lounsberry 1983), or only measured expectations after the fact with a post-hoc "better than expected-worse than expected" scale (e.g. Oliver 1977; Westbrook and Cote 1980). The present research takes another approach, that of treating safety expectations as a function of a combination of experimental manipulations and individual difference variables.

LaTour and Peat (1980) have identified three basic determinants of expectations: (1) the consumer's prior experience with the product; (2) situational factors such as promotional efforts by the manufacturer or retailer; and (3) the experiences of other consumers acting as *referent persons*. They propose, and provide empirical support for the view, that product experience is the most important determinant. In the research model safety expectations are formed by very similar determinants. Personal variables, such as experience with the product and risk aversion, together with manufacturer/retailer factors, including advertising message, level of service, safety devices, and warning labels, are depicted as predictors of safety expectations. Thus the current study is concerned with both antecedents and outcomes of safety expectations. One such outcome is assumption of risk of using the product. In other words, if a consumer clearly recognizes the risk of injury (low safety expectations) and chooses to use the product, we believe that consumer is able to anticipate the consequences of product use. From a legal perspective, the consumer will then assume some of the risk of product-related injury. From an attributional perspective,

we propose the consumer would be perceived as more responsible for any ensuing product-related injury.

Performance. In consumer satisfaction research, product performance has traditionally been used "as a standard of comparison by which to assess disconfirmation" (Churchill and Surprenant 1982, p. 492). In the majority of CS/D studies, performance was viewed as somewhat of an end in itself. Other researchers, however, have manipulated product performance to determine how expectations influence performance perceptions (Olshavsky and Miller 1972; Olson and Dover 1976) or to determine the relationship between performance measures and consumer satisfaction (Churchill and Surprenant 1982; Tse and Wilton 1988). Similar to expectations, the present study focuses on performance from a safety perspective. A wide range of safety performance levels is possible, from a completely safe product with an unblemished safety record to an extremely dangerous good capable of inflicting serious injury or even death. However, to assess the influence of the individual difference variables and experimental manipulations, safety performance was held constant in this study by incorporating an identical product-related injury into each legal protocol.

Disconfirmation. Disconfirmation results from the discrepancy between the consumer's pre-experience standards and the actual performance encountered. In the present study, performance is held constant across all cells and subjects, reducing disconfirmation to a relative comparison of respondents' expectations. In other words, when actual safety performance is the same for everyone, we would expect respondents with relatively lower expectations of safety to better anticipate product-related injuries. According to disconfirmation theory, respondents perceiving the level of safety to be much worse than anticipated (negative disconfirmation) should express dissatisfaction with the manufacturer. It is important to note that since this research

investigates the realm of losses (based on our discussion of prospect theory), the exact relationship among these constructs may differ from traditional satisfaction research (see Oliver and DeSarbo 1988, p. 499).

Satisfaction. Oliver (1981, p. 26) claims "satisfaction has defied exact specification even in those disciplines having a long-standing tradition of satisfaction." In the marketing literature, satisfaction can be generally defined as "an evaluation rendered that the (product usage) experience was at least as good as it was supposed to be" (Hunt 1977, p. 472). This definition yields relevant implications. First, the disconfirmation paradigm is assumed as *the* theory of consumer satisfaction. Satisfaction is a result of a comparison between actual performance (experience) and a pre-established standard (as good as it was supposed to be), rather than an absolute judgement. Second, satisfaction is an outcome, or a post purchase/usage consumer experience. LaTour and Peat (1980, p. 432) use this fact to differentiate attitude from satisfaction: "the primary distinction between satisfaction and attitude derives from temporal positioning: attitude is positioned as a predecision construct and satisfaction is a postdecision construct." Third, the "evaluation" can be based on cognition, affective, or a combination of both.

Satisfaction, as operationalized in traditional CS/D research, is similar to the assessment of responsibility for the incident in the current study. This construct reflects appraisal of the situation after the fact by asking the respondent to assign responsibility for the injury to (1) the manufacturer, (2) the consumer/user, or (3) the situation/chance. Although we believe assignment of responsibility shares similarities with satisfaction, important differences should be noted. Churchill and Surprenant (1982, p. 493) state "satisfaction is an outcome of purchase and use resulting from the buyer's comparison of the rewards and costs of the purchase in relation to the *anticipated consequences*." In this study we feel the consequences are

unanticipated; that is beyond the typical consumer's range of outcomes considered. We term these *unanticipated consequences* and suggest that the associated outcomes are much more severe than those affiliated with mere *dissatisfaction*. In general, this position is consistent with the extreme response to losses reported by Tversky and Kahneman (1981, p. 454).

Summary

Disconfirmation theory provides the basis for our behavioral model of unanticipated consequences. Similar to traditional disconfirmation, we propose consumers establish expectations of product safety and these standards are compared to, as well as influenced by, the evaluation of actual performance. The discrepancy between safety expectations and actual performance determine the evaluation of the incident. The more interesting aspect, however, is the concept of unanticipated consequences resulting in negative satisfaction and very strong attributions of blame. Based on the discussion of disconfirmation theory, we propose:

- Consumers establish product safety expectations on a continuum.
- Antecedents of safety expectations include individual difference characteristics and manufacturer-controlled variables. For example, respondents' experience with the product and risk aversion are two individual difference variables hypothesized to be related to safety expectations. From the manufacturer's side, we propose promotional efforts and characteristics of the product will influence expectations of safety.
- The assessment of product safety leads the consumer to assume some of the risk of using potentially dangerous products. Assumption of risk, in turn, reduces the responsibility of the manufacturer for product-related injury.
- Unanticipated consequences resulting from product usage result in an extreme form of dissatisfaction. Unanticipated consequences increases the liability of the manufacturer for product-related injury.

Attribution Theory

In the last thirty years, attribution theory has become a prominent theoretical paradigm throughout the social sciences. In fact, attribution theory was predicted to be "the dominant theoretical framework of the 1980s" in the social psychology field (Pepitone 1981). Based on the multitude of attribution studies appearing in the marketing literature (see Folkes 1988 for a comprehensive review), this prediction may have come true. For the current research, attribution theory provides an important theoretical base. A brief discussion of the general principles of attribution theory is presented in the following three sections, followed by a review of attribution research investigating product failure. More specific and detailed elements of the theory are incorporated in the development of the research model and research hypotheses.

What is Attribution Theory? Academicians have chosen a variety of manners in which to portray attribution theory. According to Jones, Kanouse, Kelley, Nisbett, Valins, and Weiner (1972), attribution theory is founded on three basic assumptions:

(1) Individuals are inclined to assign causes for important instances of behavior, and will seek additional information to do so if necessary.

(2) These causal explanations will be assigned in a systematic fashion.

(3) The specific attribution made will yield important consequences for the attributor's future behavior.

Kelley (1973. p. 107), who provided much of the early impetus for attribution research, described attribution theory as "a theory about how people make causal explanations, about how they answer questions beginning with 'why?' It deals with the information they use in making causal inferences, and with what they do with this information to answer causal questions." Kelley (1967, p. 193) claims that an individual naturally engages in such behavior in order "to attain a cognitive mastery of the causal structure of his environment." Furthermore,

Kelley (1971, p. 22) states "The attributor is not simply an attributor, a seeker after knowledge; his latent goal in attaining knowledge is that of effective management of himself and his environment." Similarly, Mizerski, Golden, and Kernan (1979, p. 123) state "As human beings search for order and meaning in their environment, they attempt to explain the causes of the events they observe. This quest to know and understand the world is the focus of attribution theory." Thus we can see that attributions naturally occur as people try to make sense of their environment and seek to gain control over it.

Steers and Mowday (1981) point out that attribution theory is a *post hoc* reasoning procedure through which an individual infers the causes of a behavior or event from the observation of that behavior or event. Calder (1977a) has suggested that observation of actual behavior is not a necessary condition for an inference to be made; observing the effect of the behavior is sufficient. Finally, Folkes (1988, p. 548) extends the domain of attribution theory to include "all aspects of causal inferences: how people arrive at causal inferences, what sort of inferences they make, and what the consequences of these inferences are."

From these descriptions of attribution theory we conclude: (1) individuals are naturally motivated to determine the cause of important events in their lives; (2) these causal attributions tend to occur spontaneously; (3) causal attributions are derived from observations made after the fact; (4) observing the actual behavior is not necessary; exposure to the outcome is sufficient; and (5) the particular causal attribution drawn will influence subsequent behavior. Based on these conclusions, attribution theory appears a relevant framework for the analysis of consumer perceptions of product liability accidents. We propose that jurors will apply the basic concepts of attribution theory to determine the causal structure of the product liability cases and the specific causal attributions drawn will guide their ensuing behavior.

Causal Explanations. Often called *The Father of Attribution Theory*, Fritz Heider's (1958) book, *The Psychology of Interpersonal Relations*, is regarded as the seminal work in the development of attribution theory. Heider assumed individuals operated as *naive psychologists* in attempting to make sense of their environment. Heider proposed that individuals carry with them their own implicit theories (common-sense) regarding causes and effects. The individual then utilizes these common-sense rules to ascertain meaning from the events and actions they witness. However, these preconceptions tend to bias the causal inference, most often resulting in people being viewed as the cause of their own behavior. Heider (1958, p. 54) further states that "behavior...tends to engulf the total field." Stated differently, the fact that an event has occurred at all is the overriding concern, leading to attributions being inferred outside of the situational context.

Kelley (1967, 1971, 1972, 1973) has developed much of the framework regarding the information utilized in drawing causal inferences, making a major distinction based on the amount of information available. Specifically, Kelley (1973, p. 108) differentiated instances where the attributor had information from only a single observation from those cases where information from multiple observations was available. In a single observation case, the attributor tends to rely on previous observations of similar situations and preconceived notions of possible causal factors, to augment the information gathered from the present event. It is important to note that individuals in this case are not making haphazard causal attributions, but are utilizing prior inferences and stereotypes. This is consistent with Heider's (1958) *naive psychology* theory.

The multiple observation case provides the attributor substantially more information to be applied in the causal attribution process. Multiple observations give rise to Kelley's (1973) *principles*

of covariance, similar to that in analysis of variance experimental design. Kelley (1973, p. 108) proposes that, given multiple observations of the same effect, an "effect is attributed to the one of its possible causes with which, over time it covaries." Kelley (1967) delineates three types of information pertinent to the covariance principle:

(1) *Consistency* - the degree to which an event is consistently associated with the attributor across time and situation.

(2) *Consensus* - the frequency with which other individuals are associated with the event.

(3) *Distinctiveness* - the extent to which an event is associated with an individual potential external cause and not associated with alternative possible causes.

Generally, when a high degree of consistency is present an individual is likely to make a stable attribution, while high distinctiveness tends to result in external attributions. High consensus situations combine these, often leading to stable, external attributions.

Additional information for drawing causal attributions is provided by the *discounter principle* - "The role of a given cause in producing a given effect is discounted if other plausible causes are present" (Kelley 1973, p. 113). When applied to the analysis of variance analogy, plausible causes comprise the independent variables. Kelley (1973) specifies persons, entities, and times as the major classes of potential attributional causes (independent variables). The behavior or effect constitutes the dependent variable; while the degree of consistency, consensus, and distinctiveness provides the necessary informational cues. Such information would likely be influential in a juror's assessment of a product liability scenario.

Dimensions of Causality. Numerous classification schemas have been developed for categorizing attributions. Several researchers (i.e., Frieze 1976; Anderson 1983) have identified ability, effort, strategy, difficulty of the task, mood, and luck as the most commonly used causal

explanations of events. However, most of the theoretical development has been conducted utilizing more general dimensions of causality rather than the actual attributions themselves; in particular locus, stability, control, and globality. Several researchers have contributed to the development of these dimensions of causality.

Heider (1958, p. 82) proposed the first systematic analysis of causal structure based on "two sets of conditions, namely, factors within the person and factors within the environment." This *locus* dimension began to dominate attribution research following Rotter's (1966) work classifying individuals as either *internals* or *externals*. Thus locus is based on the assumption that causes can be either internal (person) or external (environment) to the attributor. In the case of a product-related injury, examples of internal attributions are to the person's skill or ability in using the product, willingness to follow directions, and level of caution exercised. External attributions include poor design of the product, failure to provide safety warnings, or simply bad luck.

Although locus was universally accepted as a necessary dimension of causal attribution, it was argued that locus alone was not sufficient. Weiner, Frieze, Kukla, Reed, Rest, and Rosenbaum (1971) recognized that some internal causes tend to fluctuate across time and situation (i.e., level of caution exercised) while other factors remained relatively constant (i.e., skill or ability with the product). Weiner et al. (1971) labeled this second dimension of causality *stability*, reflecting the variability of the cause over time. Stability addresses the question "Is the causal explanation of the event fixed or able to fluctuate?"

Using the same form of deductive logic, Rosenbaum (1972) identified a third dimension of causality. Rosenbaum pointed out that not only did causes vary according to their locus and stability, but also to the degree they were under the individual's volitional control.

For example, the level of caution exercised when using the product is under the volitional control of the user, whereas the operator's skill is not. The degree of volitional control has been termed *controllability* (Weiner 1979).

Finally, the *globality* dimension differentiates those causes which are unique to a specific situation or task from those which can be generalized (Abramson, Seligman, and Teasdale 1978). This dimension is more difficult to operationalize and frequently fails to provide mutually exclusive classifications. For instance, in some cases, ability might be classified as a general trait that would impact on any of several tasks that the person would undertake. On the other hand, ability could be categorized as task specific if the individual works hard or has superior abilities only in reference to a particular task. As an example, an individual could perceive lack of skill in using products as general (i.e., due to poor coordination) or specific (i.e., limited experience with the particular product).

General Attribution Findings. At least two other relevant factors have been identified by researchers. First are studies which have pointed out the natural tendency for individuals to accept greater causal responsibility for positive outcomes than for negative outcomes. Labeled the *self-serving bias* by Miller and Ross (1975) and the *ego defensive bias* by Stevens and Jones (1976), we have all noticed the tendency for people to engage in this behavior. Second is the *actor-observer difference* (Jones and Nisbett 1972), the label applied to the difference in perceptions held by those involved in the activity compared to those observing the event. Research indicates that actors are more likely to attribute performance to external causes such as the environment; while observers tend to place the responsibility on the actor. This finding has been particularly well substantiated in the case of negative outcomes (i.e., poor performance).

The dimensions of causality are directly applicable to the study of product liability cases. In addition, in their role as jurors, the *ego defensive bias* and *actor-observer difference* are likely to be operant. We propose jurors will utilize the dimensions of causality and these biases may be present when determining the cause of product-related injuries.

Attributions of Product Failure. Consumer reaction to product failure (physical breakdown) has been studied in an attributional framework. Although we feel product liability cases are substantially more extreme than the instances of product failure previously investigated, these studies provide the closest analogy to the current research. The following section reviews the studies appearing in the marketing literature.

The earliest attributional analysis of product failure was conducted by Jolibert and Peterson (1976). Jolibert and Peterson (1976, p. 448) focused on consumer perceptions of the "three potential causes of product failure - product, consumer, and situation." Through the use of experimental scenarios, subjects were exposed to four different products and asked to assign the cause of each product failing to the consumer, product, or situation. The results lead to three "generalizations" (Jolibert and Peterson 1976, p. 454-55):

> (1) The greater the usage complexity of a product (the more involved the consumer must be in using the product), the more likely product failure will be attributed to the consumer/user.
>
> (2) The more times a product is used or applied, the more likely it is product failure will be ascribed to the product itself.
>
> (3) The wider the variety of uses to which a product is put, the more likely it is that product failure will be attributed to the usage environment or situation.

Other studies utilizing an attributional framework to study product failure have treated attributions of responsibility as a mediating factor. Specifically, attributions have been found to mediate

the relationship between product failure/consumer dissatisfaction and consumer complaint behavior (Valle and Wallendorf 1977; Krishnan and Valle 1979), type of redress preferred (Folkes 1984), and future purchase intentions (Folkes, Koletsky, and Graham 1987). These studies have typically utilized the locus, stability, and controllability dimensions of causality to predict attributions of blame.

Valle and Wallendorf (1977) conducted open-ended interviews to determine if attributions about a product's performance were similar to those proposed for personal achievement (i.e., locus, stability, and controllability; see Weiner 1980). They found that the locus dimension was particularly relevant, but more complex than the basic internal/external distinction. Valle and Wallendorf (1977) suggest a more detailed locus classification termed *psychological distance from the consumer*. According to this system, attributions are arranged on a continuum from internal to external: from the consumer, to people known by the consumer, to the retailer, to the manufacturer, and finally to the social system. In addition, Valle and Wallendorf (1977) report a relationship between the *psychological distance* of the attribution and consumer complaint behavior.

Valle later extended her work with Wallendorf by empirically establishing a taxonomy of complaint behavior for consumer dissatisfaction. Krishnan and Valle (1979) identified four types of consumer complaint behavior: *non complaining behavior* (no action); *private action* (i.e., complaining to family and friends; refusing to purchase the product in the future); *remedial action* (i.e., ask for a refund; complaining to the company); and *legal action* (i.e., hire a lawyer; stop payment to the company). Krishnan and Valle (1979) also confirmed the mediating role of causal attributions, finding that the attribution of blame mediated the type of consumer complaint behavior.

Folkes (1984) initially undertook an exploratory study to determine if consumers applied the dimensions of causality in their

personal attributions of a negative service encounter (visiting a restaurant). Results indicated that all three dimensions (locus, stability, and controllability) were utilized in drawing causal attributions. Folkes then manipulated the dimensions of causality in an experimental design (2 X 2 X 2) to determine consumer reactions to product failure. Several findings from her study are relevant to the present research. First, unexpected product failure was found to result in spontaneous causal attributions. Second, the causal dimensions were related to an emotional reaction (anger). Finally, the causal attribution a consumer draws for the failure of a product is related to the consumer's preferred redress.

Folkes and Kotsos (1986) empirically compared buyers' and sellers' causal attributions for product failure. The findings are consistent with the *ego defensive bias* (Stevens and Jones 1976). Specifically, Folkes and Kotsos report that sellers of a particular good are more inclined to place the blame for product failure on the consumer, while consumers attributed the failure to the product/seller. A second study confirmed the role of consensus formation (Kelley 1967) in causal attributions; high consensus (failure occurred frequently) resulted in attribution of failure to the product while low consensus (failure a rare occurrence) lead to causal ascriptions to the user. Folkes and Kotsos (1986, p. 79) draw a conclusion directly applicable to this study: "jurors in product liability cases may tend to favor consumers, ignoring and distorting evidence not confirming their preconceptions." In essence, Folkes and Kotsos have identified a bias against the manufacturer that may permeate product liability litigation.

A final study investigating product failure from an attributional perspective is particularly germane to the present research. Folkes, Koletsky, and Graham (1987) conducted a field study of consumer attributions for delayed airline flights. This study provides a path analytic model of the attributional process "whereby attributions and

importance influence affect, then attributions and affect influence behavioral response" (Folkes, et al. 1987, p. 537). The results supported the hypothesized causal paths, with (1) attributions of control, importance, and stability predicting anger; (2) control and anger predicting desire to complain; and (3) control, stability, and anger predicting intention to repurchase. In brief, Folkes, Koletsky, and Graham (1987) have illustrated the mediating role of affect between causal attributions and behavioral responses.

Summary

Attribution theory "provides a general analytical framework which permits investigation of nearly any observed behavioral phenomena" (Jolibert and Peterson 1976, p. 447). From our review of attribution theory, it appears that product liability court cases are particularly well suited to attributional analysis. Furthermore, we believe the concepts of attribution theory will provide insights into the particular causal attributions jurors are likely to draw. Several elements of attribution theory are critical to this research effort:

- People engage in spontaneous attributional activity to determine the cause of important events in their lives. Individuals are particularly compelled to make attributions in the case of negative and/or unexpected outcomes.
- Causal attributions are *post hoc* reasoning processes; that is attributional activity occurs after the occurrence of an event.
- An individual is capable of drawing causal attributions from exposure to the effect or outcome, without viewing the actual behavior.
- Attribution theory has proven useful in the investigation of consumer perceptions of product failure. Studies have successfully manipulated the dimensions of causal attributions - locus, stability, and controllability - in experimental scenarios and each has been shown to relate to assignment of blame for product failure.
- Three bases of responsibility of product failure have been utilized across studies: (1) product/manufacturer, (2) consumer/user, and (3) situation/environment.

- Attributions of product failure have been shown to mediate the relationship between causal dimensions and consumer behavioral responses. Furthermore, empirical findings support a causal sequence of attributions——>emotions——>behavioral consequences.

The Research Model

Based on our review of the legal and marketing literature concerning product liability and the theoretical background, we are now prepared to develop a behavioral model of the liability process. Although the work of several researchers influenced the model, four individuals - Kelly Shaver, Harold Kelley, John Michela, and Bernard Weiner - were particularly influential.

Developing A General Model

First, Shaver's (1985) book, *The Attribution of Blame: Causality, Responsibility, and Blameworthiness*, demonstrates the complexity of establishing a theory of assignment of blame. Shaver (1985, p. 12) weaves an eclectic attributional "theory of blame" which mixes the "philosophical and psychological analyses of human knowledge and action." While it is difficult to identify specific instances where Shaver's work has been influential, it has tended to permeate the entire research model. His contribution to the current research must be acknowledged.

Kelley and Michela's (1980) study can be more directly applied to the current research. After reviewing the attribution literature, Folkes (1988, p. 555) points out "a distinction has been drawn between studies examining antecedents of causal inferences and those examining consequences of causal inferences." The study by Kelley and Michela (1980, p. 458), however, investigates "both antecedents and consequences of attributions for behavior." Similarly, any comprehensive model of the liability process must also include both *antecedents* and *consequences* of causal attributions. Kelley and Michela (1980, p. 459)

present a "general model of the attribution field" (see Figure 2.2) that guided the initial development of the research model.

Kelley and Michela's model illustrates several points relevant to a model of the liability process. First, the *antecedents* of causal inferences are directly applicable to product liability court cases. Jurors are exposed to *information* regarding the facts of the case and the circumstances surrounding the accident. For example, the review of the marketing literature revealed that inadequate warning labels have been frequently cited as a marketing variable evoking liability (see Morgan 1982). In addition, we propose that a juror's *beliefs* and *motivations* will influence the attributions s/he makes in a liability trial.

A juror is placed in a position that s/he is not only motivated, but required to make *attributions* of the cause of the accident. From the review of attribution theory, the logical bases of responsibility in product liability cases are the product/manufacturer, the consumer/user, or the situation/environment. Finally, we propose the *consequences* of attributions in a product liability trial include both affect and behavior. The often tragic nature of product-related injuries are likely to evoke affective reactions, while a juror is forced to engage in behavior (i.e., determine a jury award) as the ultimate outcome of a product liability trial. Thus, the model presented by Kelley and Michela (1980) includes antecedents, attributions, and consequences, provides some detail regarding the categories of antecedents and consequences, and depicts attributions as a mediator between antecedents and consequences. This model provides an initial framework for the development of a model of the liability process.

Weiner (1985a; see also Weiner 1982, Weiner and Graham 1984) extends the Kelley and Michela model by providing a much more detailed look into the attribution process. In particular, Weiner (1985a, p. 548) elaborates on the role of affect in the attributional process by

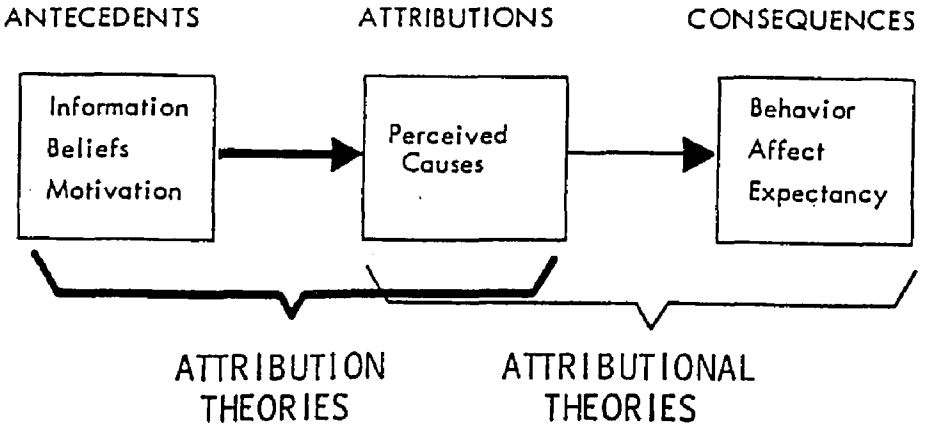

Figure 2.2

Kelley and Michela's General Model of the Attribution Field

constructing a model which "relates the structure of thinking to the dynamics of feeling and behavior." Weiner's perception of the attribution process differs from Kelley and Michela's in at least one important aspect: whereas Kelley and Michela (1980) classify both *behavior* and *affect* as *consequences* of attributions, Weiner depicts *affect* as a mediator between *causal ascriptions* and *behavioral consequences*. Although Weiner's work is conducted in the context of achievement motivation, both his theoretical framework and empirical findings appear generalizable to the study of product liability.

Weiner, Russell, and Lerman (1978) studied affective reactions of students asked to imagine that a fellow student had passed or failed an exam due to either hard work or bad luck. Later these same researchers (Weiner, Russell, and Lerman 1979) asked subjects to recall an event in their own life when they had experienced success or failure. In both studies respondents indicated the intensity of their affective reactions on ratings scales for some preselected emotions. The results were consistent across the two studies; success resulted in feelings of *happiness*, while failure evoked *frustration* and *sadness*, regardless of the cause of that outcome. Therefore, at least some affective reactions appear to be *outcome-generated emotions* (Weiner 1985a, p. 561). In product liability court cases, the *outcome* is a product-related injury severe enough to prompt legal action, clearly a more extreme form of failure than that associated with an academic exam. Thus an initial feeling of frustration and/or sadness could be expected of product liability jurors.

Such a negative outcome and the initial affective reaction would motivate the perceiver to make a causal ascription (Wong and Weiner 1981). That is, an attributional "sequence is initiated by an outcome that individuals interpret as positive...or negative" (Weiner 1985a, p. 564). Next in the causal sequence, "A different set of emotions is then generated by the chosen attribution(s)" (Weiner 1985a, p. 560).

These emotions, such as *surprise*, *calmness*, and *serenity* are labeled *attribution-dependent emotions* (Weiner 1985a, p. 560). Additional attribution-dependent emotions appear to be related to a particular dimension of causality (see Weiner 1986). Termed *dimension-related emotions*, several affective reactions including *pride*, *self-esteem*, *anger*, *pity*, *guilt*, *shame*, and *hopelessness* have been shown to relate to specific dimensions of causal attributions (Weiner 1985a, pp. 561-63).

Finally, Weiner (1985a, p. 559) points out "These diverse affective reactions could generate quite disparate behavior." Of particular relevance to this study, is the discussion of *helping behavior*. Based on Weiner's theorizing, a potential helper exposed to a person in need seeks to determine why help is needed. If the cause of the event is uncontrollable, pity is the emotion experienced and help is extended. However, if "the cause is perceived as controllable, then the person is held responsible, anger is experienced, and help should be withheld" (Weiner 1985a, p. 569). The situation involving *helping behavior* depicted by Weiner is precisely the circumstances facing a consumer/juror in a product liability trial.

Weiner (1985a, p. 548) combines these various relationships into a detailed model of the attributional process in which "dimensions of causality affect a variety of common emotional experiences...and affect, in turn, (is) presumed to guide motivated behavior." The complete model is presented in Figure 2.3.

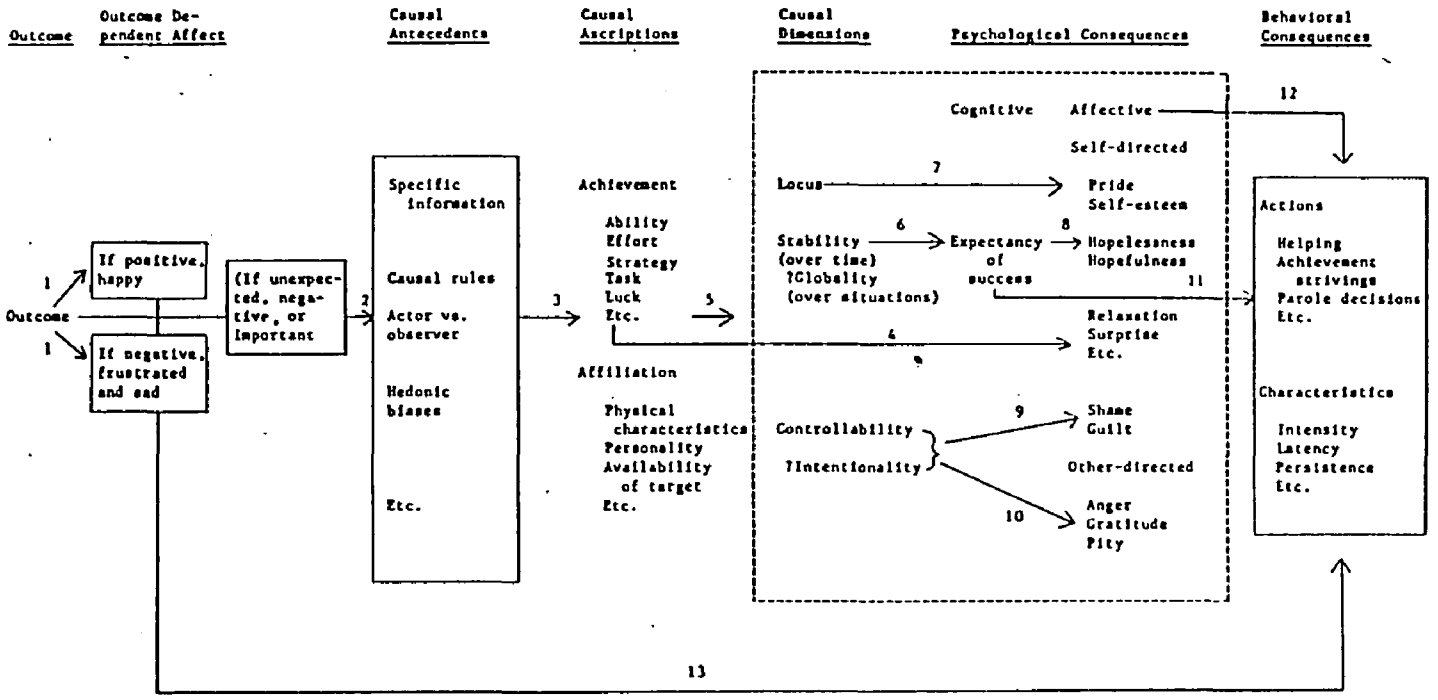

Figure 2.3

Weiner's Attributional Theory
of Motivation and Emotion

Kelley and Michela and Weiner provide a theoretical structure for the development of an attributional model of the liability process. With consideration to Shaver's work on the attribution of blame, we developed the general model of the product liability process (see Figure 2.4). As can be seen in Figure 2.4, the general model of the product liability process parallels the sequence of events of Kelley and Michela's and Weiner's attributional models. Our general model includes (1) the outcome (a product-related injury), (2) causal antecedents (plaintiff, defendant, and juror characteristics), (3) unanticipated consequences, (4) causal ascriptions (assignment of responsibility), (5) psychological consequences (affective reactions), and (6) behavioral consequences (jury award).

While the *general model* provides a useful framework for organizing the major elements of the product liability process and establishes a causal sequence, it does not lend itself to empirical testing. An endless number of specific injuries, factors, characteristics, and emotions could be offered to illustrate the general model. Recognizing this fact, Weiner (1985a, p. 564) states "The blanket etcetera at the bottom of the antecedents merely conveys that there are many unlisted determinants of the selected attribution." This holds true for the other categories of the general model as well. Therefore, to test the model, the specific factors and characteristics that comprise each element of the general model must be specified, a manageable number of these items selected for empirical investigation, and explicit hypotheses advanced. This is accomplished in the following sections.

Identifying the Specific Factors

To create a testable model, the specific items that fall under each element of the general model must be delineated. The process utilized to identify these factors consisted of both secondary and primary research. First, reviewing the marketing, psychology, and legal literature provided numerous situational influences, characteristics of

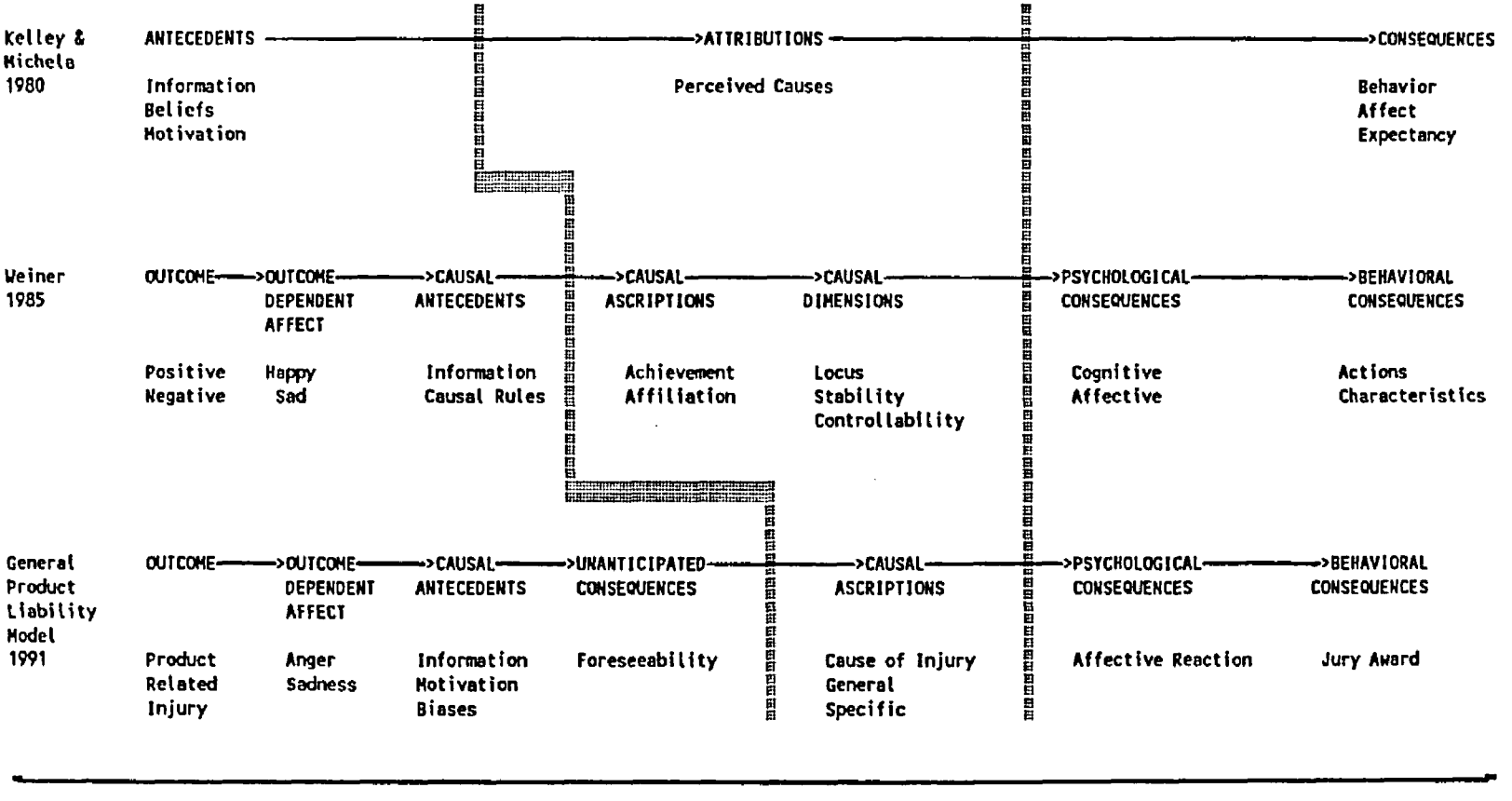

Figure 2.4

General Model of the Liability Process

the defendant firm and plaintiff, individual difference characteristics of the perceiver (juror), and emotional reactions to help specify the model. The review of the literature, however, yielded a far from exhaustive list of specific factors.

Given the nature of the present research, the defendant firm factors are of particular interest. As discussed earlier, several areas of the marketing function can, according to legal statutes, result in liability. Specifically, the actions of sales personnel and channel members, claims made in print and broadcast advertising, and product design, packaging, labeling, and warnings were identified as potentially liable marketing actions. However, no empirical investigation of consumer perception of these factors and their role in liability litigation was discovered. Furthermore, there is interest in determining if additional marketing-related variables influence the consumer/juror attributional process. Thus, the next step is to determine how consumers viewed product liability.

Gaining greater insight into the consumer perspective was accomplished through a series of focus group discussions. Focus groups were conducted to explore consumer perceptions regarding product liability and the litigation process. The objective of the focus groups was to compliment the secondary research and develop a more extensive list of factors under each element of the product liability model. The main emphasis of the focus groups was on generating discussion of marketing's responsibility in insuring product safety, guided by those areas of liability uncovered in the literature search. Thus the approach taken in this study falls under what Calder (1977b, p. 356) has termed *The Exploratory Approach* to qualitative research. That is, focus groups were used to obtain "prescientific knowledge" that was intended to be later verified by quantitative research (Calder 1977b, p. 355-6.)

Six separate focus groups comprised of sixty-one individuals were conducted in Baton Rouge, Louisiana. According to Calder (1977b,

p. 362), "Heterogeneous groups might yield rich information for the exploratory or clinical approaches." Therefore an effort was made to incorporate as much diversity in demographic profiles and personality types as possible within each focus group. However, one characteristic of particular importance was knowledge and experience regarding the legal system. It was feared that participants unfamiliar with legal practice might be intimidated and less likely to express their views in front of "experts" on the topic. To avoid this potential pitfall, two focus groups consisted only of individuals well versed on legal issues (attorneys, second year law students, and paralegals); two groups had an attorney present to serve as a "resource" person and to clarify any legal questions that arose; while participants in the remaining groups had no formal training in law.

The author served as moderator for each of the sessions, assisted by a colleague well-informed regarding the research issues on two occasions. The length of each focus group ranged from slightly less than two hours (110 minutes) to over four hours, and were recorded on audio cassette. In all cases, the participants displayed interest in the topic and a willingness to contribute. The focus groups yielded a large number of specific items that, along with those factors gleaned from secondary research, have been incorporated into the extended model of the liability process presented in Figure 2.5.

Research Hypotheses

The model presented in Figure 2.5 integrates constructs from previous research with additional situational influences, defendant and plaintiff factors, individual difference variables of the juror, and affective reactions. While more complete than previous models of the liability process, the research model makes no claim of fully specifying all the factors influencing liability verdicts (hence the etceteras). Similarly, the specific hypotheses we propose to test the model do not

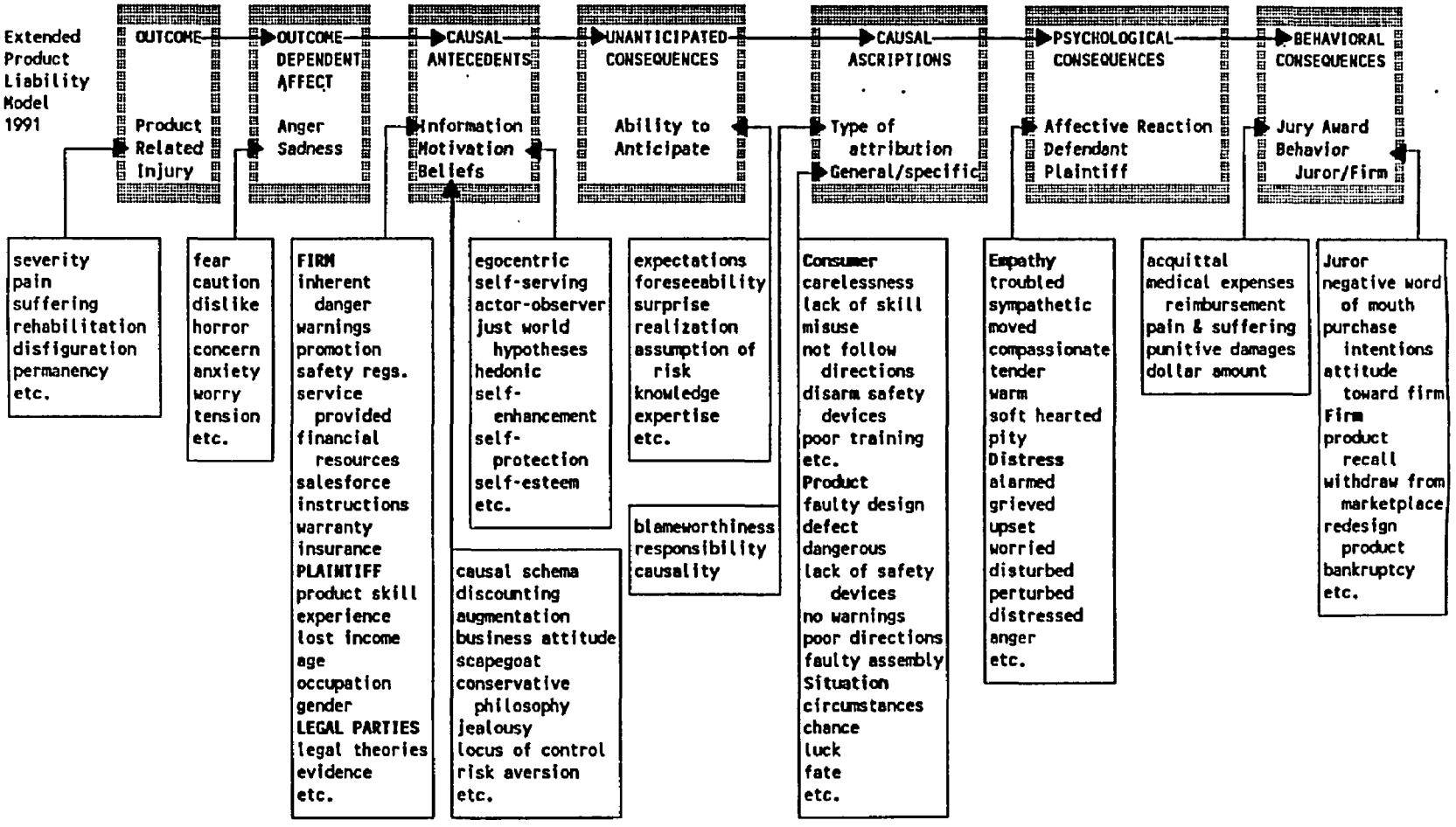

Figure 2.5

Extended Model of the Product Liability Process

include all the possible variables and nor exhaust all the relationships that could be derived from the model.

In particular, the defendant firm factors included in the current study must be restricted. Although each of these factors are considered worthy of further investigation, and would deserve inclusion in a fully specified model of the liability process, some of the factors are outside of the scope of the present study. In addition, the number of required experimental cells necessitated reducing these factors to a more manageable level. By focusing on those factors most directly controllable by management, and which focus group participants indicated as most important, five relatively divergent defendant firm factors were selected for inclusion in this study:

- Inherent danger of the product
- Product safety warnings
- Safety in advertisements
- Meet/exceed governmental safety requirements
- Level of service

It will be noted that *plaintiff characteristics* are not included in the study. The focus of this investigation is on managerial decision-making and factors controlled by the marketing discipline. While it has been shown elsewhere (Darden, et al. 1991) that plaintiff characteristics do influence product liability jury awards, they are judged to be beyond the scope of the current study.

Finally, a *caveat* is in order. The majority of the hypotheses must be considered exploratory in nature. The hypotheses are largely deduced from intuition, qualitative research, relevant theoretical development, or, in a few cases, based on earlier empirical investigations. Such an approach, however, appears very consistent with Heider's (1958) conception of *naive psychology*. Heider stresses the importance of qualitative research and everyday interpersonal interaction in developing new ideas and charges that if a researcher

relies "only on experimental results, I think his knowledge is very limited. Experiments are very good for the purpose of testing an idea, but you usually can not get new ideas from them" (in Harvey, Ickes, and Kidd 1976, p. 3). This quote tends to capture the nature of the current research effort, where several "new ideas" are tested in an experimental setting.

The following sections present the hypotheses to be tested in the present research. For organizational purposes, the dependent measures will be discussed in four groups: (1) unanticipated consequences, (2) assignment of responsibility, (3) affective reaction, and (4) jury award. The extended research model is presented in Figure 2.6, and specific individual hypotheses derived from the model are delineated in the text that follows.

Unanticipated Consequences

A central component of the research model is a construct termed *unanticipated consequences* (UC) which intervenes between the antecedents of casual inference (experimental manipulations and individual difference characteristics) and the dependent measure of assignment of responsibility. UC shares similarities to the disconfirmation paradigm of product satisfaction. Based on the disconfirmation paradigm, Churchill and Surprenant (1982, p. 493) define satisfaction as "an outcome of purchase and use resulting from the buyer's comparison of the rewards and costs of the purchase in relation to the anticipated consequences." In this study, however, the *consequences* of product usage are largely *unanticipated*. That is, no consumer fully anticipates being injured or killed by a product they purchase and we assume an observer of the event will recognize this. However, we do feel that variance will exist in perceptions of just how unanticipated the injury actually was.

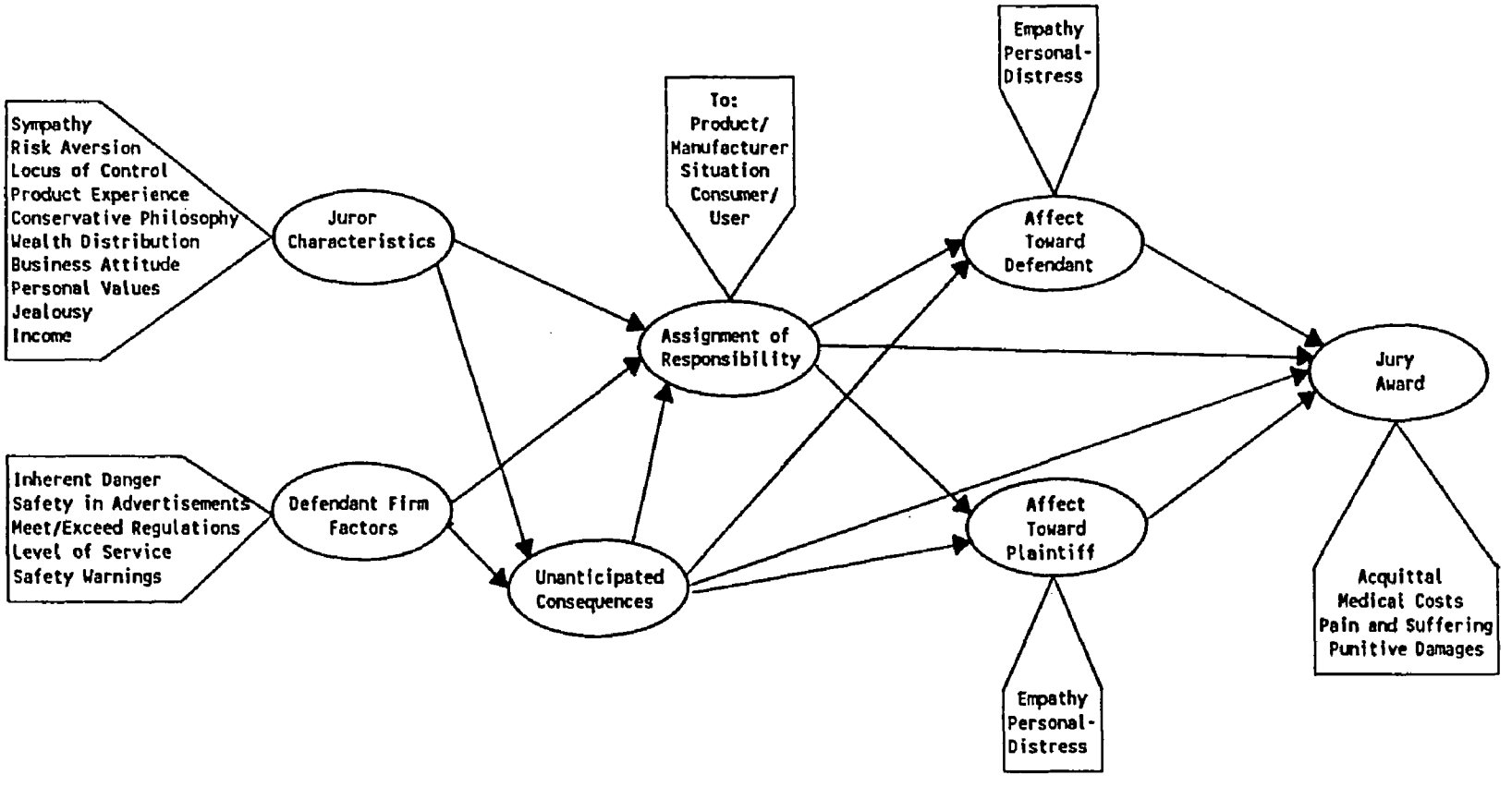

Figure 2.6

Extended Form of the Research Model

LaTour and Peat (1980) have identified three basic determinants of consumer expectations: (1) prior experience with the product, (2) situational factors such as promotional efforts by the manufacturer or retailer, and (3) the experiences of other consumers acting as *referent persons*. In the research model, we propose that safety expectations are formed by very similar determinants - (1) personal variables of the respondent together with (2) manufacturer/retailer factors.

Personal Variables. The research model identifies two individual difference variables which influence the respondent's assessment of how unanticipated the injury was, the respondent's experience with the product and risk aversion. The *false consensus effect* (Ross, Greene, and House 1977) depicts a motivational bias - the tendency for an individual to assume that others share his/her preferences and attitudes - that offers an explanation for how these factors relate to UC. First, a respondent possessing a high level of experience with the product would be familiar with the dangers and possible consequences of product usage. If the respondent assumes that the user shares this experience and information - the false consensus effect - then the user should likewise anticipate the consequences. Second, a risk averse respondent would exercise extreme caution and display a tendency to recognize the potential danger from product usage in his/her own life. Again assuming the false consensus effect, the respondent would expect the user to share his/her recognition of possible consequences of using the product. Thus we hypothesize:

H1a: A negative relationship exists between respondent experience with the product and unanticipated consequences.

H1b: A negative relationship exists between respondent risk aversion and unanticipated consequences.

Experimental Manipulations. The hypothesized relationship between the experimental manipulations and UC is based largely on the concept of search, experience, and credence properties (Darby and Karni 1973;

Nelson 1974). To make the consumer aware of the danger, the manipulations must represent search properties. In other words, we propose that information the consumer is exposed to prior to actually using a product would affect the level of UC.

In this study product warning labels, the level of service provided by the retailer, and the advertising message each are capable of providing the consumer information regarding the possible consequences of product usage. Specifically, obvious product warning labels and a high level of retailer service should make the consumer aware of the danger involved and reduce UC. Conversely, advertisements that stress the safe nature of a product (e.g. Volvo, Mercedes Benz, and Michelin tires) or depict a product as "totally safe" or "absolutely harmless" may create a latent sense of security regarding product safety, heightening UC. Thus we hypothesize:

H1c: A negative relationship exists between the prominence of safety warnings and unanticipated consequences.

H1d: A negative relationship exists between the level of service provided and unanticipated consequences.

H1e: A positive relationship exists between the prominence of product safety in advertising and unanticipated consequences.

In addition to these information sources, the nature of the product itself should effect the level of UC. The perceived risk of use of a variety of products has been investigated by Rethans and Albaum (1981) who reported a wide variance in consumer perception of the inherent danger of the products. Obviously a product perceived as inherently dangerous should have lower levels of UC. Thus we hypothesize:

H1f: A negative relationship exists between the inherent danger of the product and unanticipated consequences.

Summary. Unanticipated consequences reflects the respondent's assessment of the plaintiff's ability to anticipate the injury. UC is

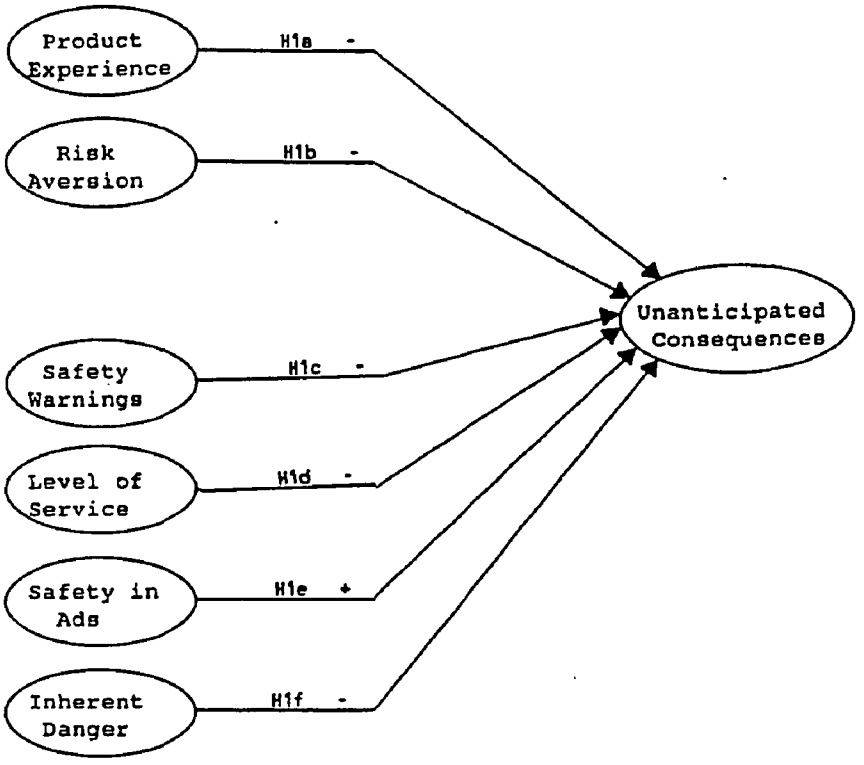

Figure 2.7

Model for Predicting Unanticipated Consequences

expected to be a function of six antecedents of causal inferences. Figure 2.7 portrays the hypothesized relationships among these variables.

Assignment of Responsibility

The second dependent variable in the proposed model of the liability process is the assignment of responsibility for the accident. As consumers, individuals are frequently exposed to media sources reporting stories of people injured by products they themselves use. In their role as jurors, consumers are forced to ponder causes of injuries and determine precisely when and how much compensation should be awarded. In both roles we feel that an individual pursues his/her natural motivation "to attain a cognitive mastery of the causal structure of his environment" (Kelley 1967, p. 193) and determine who or what is responsible for such events. Furthermore, the often tragic outcome of product liability scenarios creates a situation in which people are highly motivated to make causal attributions (Weiner 1985a, 1985b). In the current study, assignment of responsibility is assumed to be made to the manufacturer/product (ARM) and/or to situational influences (ARS). These constructs are discussed in detail in Chapter Three.

Twelve predictors of assignment of responsibility are included in the proposed research model. Each of the five experimental manipulations, six respondent characteristics, and UC are all hypothesized to affect the assignment of responsibility. The following section discusses these relationships.

Experimental Manipulations. The experimental manipulations for safety regulations, product safety warnings, level of service, advertising message, and inherent danger are proposed to influence ARM. Safety regulations, product safety warnings, and inherent danger of the product are also hypothesized to be related to ARS. According to Jones and

Davis (1965; see also Kelley and Michela 1980) these manipulations can be classified as *information* used by perceivers in drawing causal inferences.

The model depicts a positive relationship between level of service and ARM. This relationship is derived from Kelley's (1973) *discounting principle* - individuals tend to discount a potential cause when an alternative attribution could account for the behavior. In this case, a higher level of service (i.e., the salesperson taking an active role in the selection of the product, the retailer assembling the product, etc.) would serve to reduce or eliminate other possible causes, thus focusing blame for the accident on the marketing channel. Thus we hypothesize:

H2a: A positive relationship exists between the level of service provided and assignment of responsibility to the manufacturer.

A negative relationship between meet/exceed safety regulations and the prominence of warning labels and ARM is hypothesized. With these factors, the legal perspective and the attributional explanation tend to conflict. Under the legal doctrine of strict liability, the actions of the defendant are irrelevant. Therefore, simply meeting the required government standards for safety regulations and warning labels is all that is required and anything in addition (assuming that an injury does occur) is wasted effort. In making attributions, however, the *controllability* (Rosenbaum 1972; Weiner, Russell, and Lerman 1979) of the causal factor is relevant information. In practice, safety standards and warning label requirements are not under the volitional control of a manufacturer, but the willingness to go beyond these standards in an effort to make a safer product is. Assuming that government standards are in place to insure product safety, any goods exceeding these standards must be even "safer than necessary." Consequently, accidents resulting from one of these products may be attributed to carelessness on behalf of the consumer, thereby *discounting* manufacturer blame. Thus we hypothesize:

H2b: A negative relationship exists between willingness to exceed safety regulations and assignment of responsibility to the manufacturer.

H2c: A negative relationship exists between the prominence of safety warnings and assignment of responsibility to the manufacturer.

As with ARM, a negative relationship between meet/exceed safety regulations and the prominence of warning labels and ARS is hypothesized. Safety standards are established and warning labels affixed to products to insure their safe use. A product exceeding these required safety standards would be safer to use across a variety of situations. Detailed product safety warnings would make the user aware of dangerous situations and lessen the risk of injury due to an accident. In both cases, individuals are likely to discount situational influences (Kelley 1973) and shift the responsibility for the accident to the user. Thus we hypothesize:

H3a: A negative relationship exists between willingness to exceed safety regulations and assignment of responsibility to the situation.

H3b: A negative relationship exists between the prominence of safety warnings and assignment of responsibility to the situation.

Stressing product safety in advertising is hypothesized to increase manufacturer blame. Pyszczynski and Greenberg (1981) provide support for this proposition in their investigation of attributional search. Consistent with the disconfirmation paradigm, Pyszczynski and Greenberg found that attributions of causality were greatest when expectancies were disconfirmed. Similarly, Kamins and Assael (1987) found that subjects more critically evaluated the product when their experience failed to meet the firm's promises.

We propose that a heightened expectation of product safety could result from the advertising message. In other words, advertisements claiming a product is safe serve to establish an expectation of safety that the product must meet. When an injury results from the use of this

product, negative disconfirmation results. One likely outcome is the attribution of blame for the accident to the manufacturer of the product. Thus we hypothesize:

H2d: A positive relationship exists between the prominence of product safety in advertising and assignment of responsibility to the manufacturer.

We propose that injuries resulting from the use of an inherently dangerous product will decrease both ARM and ARS. According to Kelley's (1967) principles of covariance, an inherently dangerous product would provide high consensus and consistency information. That is, the product is recognized as being dangerous by most or all consumers across a variety of situations. However, an injury does not result whenever or wherever the product is used, but only in a few instances. Therefore, distinctiveness becomes the critical dimension in determining causality. The perceiver then attempts to determine what was unique about this particular case that resulted in an injury.

Since the potential for injury is present whenever a dangerous product it is used, but accidents do not occur every time, the product is discounted as a casual factor. Therefore, injuries resulting from a product recognized as being dangerous do not occur purely from the inherent danger of the product, but likely a characteristics unique to the user (i.e. carelessness, lack of skill, failure to follow directions, etc.). Assuming "inherent danger" and "usage complexity of a product" to be analogous, Jolibert and Peterson (1976) provide collaborating empirical support. Jolibert and Peterson (1976, p. 453) found that "The greater the usage complexity of a product...the more likely product failure will be attributed to the consumer/user." Thus we hypothesize:

H2e: A negative relationship exists between the inherent danger of the product and assignment of responsibility to the manufacturer.

The relationship between inherent danger and ARS might be better understood by considering a product judged inherently safe. Unlike a dangerous product, where we realize an injury could result whenever we use the good, injuries from a "safe" product are exceptionally rare. Why then, in this particular case, did the person get hurt? For an injury to occur from a seemingly harmless product, something must have been "distinctive" about this particular situation. In other words, an injury from a safe product is a freak incident that just occurred by chance or plain bad luck! Thus we hypothesize:

H3c: A negative relationship exists between the inherent danger of the product and assignment of responsibility to the situation.

Personal Variables. Even when exposed to the same information, not every individual is expected to draw identical causal inferences regarding who or what is responsible for the incident. According to Weiner (1985a, p. 555), "Perceived causality certainly will differ from person to person." Kelly and Michela (1980) claim individuals may be "motivated" by hedonic or esteem needs, as well as influenced by "prior beliefs" about the relationships among causes when making causal attributions. In short, individual differences in motivations and beliefs will influence the attribution of blame. In the current study, personal characteristics of the consumer-juror hypothesized to relate to ARM include the respondent's experience with the product, liberal/conservative philosophy, attitude toward the business community, and jealousy. Personal characteristics we propose influence ARS are product experience, locus of control, and risk aversion.

According to Mizerski, Golden, and Kernan (1979, p. 135), experience and involvement with the product is likely to "create differences in attributions for different product situations." Respondents that are experienced with the product are hypothesized to place less blame on the product/manufacturer and the situation for the accident. Support for this hypothesis comes from two elements of

attribution theory. First, *defensive attributions*, the tendency to blame the victim for negative events (Folkes and Kotsos 1986), are likely to be operant for someone that is experienced with the product. Empirical studies (Shaver 1970; Burger 1981) have shown "people who are in a position themselves to be victims blame a victim for suffering a mishap" (Folkes and Kotsos 1986, p. 75). If a respondent that uses the product blames the product/manufacturer for the injury, what is to prevent that individual from experiencing the same fate? However, if the accident is attributed to carelessness or misuse by the victim, then the respondent does not have to endure the same consequences when they use the product.

Second, the consistency (Kelley 1967) or stability (Weiner 1986) dimension of causal attributions would also indicate that a respondent experienced with the product would be more likely to focus the blame on the user. If the respondent has used the product at different times and across situations without incurring an injury; then the likely causal agent is not the product or situation, but something unique about this particular user. Thus we hypothesize:

H2f: A negative relationship exists between respondent experience with the product and assignment of responsibility to the manufacturer.

H3d: A negative relationship exists between respondent experience with the product and assignment of responsibility to the situation.

Liberal/conservative philosophy, attitude toward the business community, and jealousy are each prior beliefs and attitudes of the respondent hypothesized to affect ARM. Folkes (1988, p. 554) indicates research exploring *self-labelling effects* has proven "Labelling oneself as a certain type of person should lead consumers to behave consistently with that label." Prior research has found evidence of such attitude-based attributions. Specifically, Regan, Straus, and Fazio (1974) and Bell, Wicklund, Manko, and Larkin (1976) have found that the good behavior of a liked person and the bad behavior of a disliked one tend to be attributed to personal factors of those entities. Intuitively,

little opposition can be mustered to oppose these findings. Therefore a "conservative" should behave as such, holding the user of the product accountable for his/her own actions, thus placing less blame on the product/manufacturer. Similarly, a positive attitude toward business should result in less blame being placed on the manufacturer. Conversely, respondents jealous of another's good fortune and lucky breaks, and seeing themselves as the victim of their circumstances, can identify with the victim of the accident and seek to penalize the product/manufacturer. Thus we hypothesize:

H2g: A negative relationship exists between respondent conservative philosophy and assignment of responsibility to the manufacturer.

H2h: A negative relationship exists between respondent attitude toward business and assignment of responsibility to the manufacturer.

H2i: A positive relationship exists between respondent jealousy and assignment of responsibility to the manufacturer.

As depicted by the research model, the respondent's locus of control is hypothesized to influence ARS. According to MacDonald (1973, p. 169), "Internal-external locus of control refers to the extent to which persons perceive contingency relationships between their actions and their outcomes." MacDonald (1973, p. 169) continues to define *Internals* as those who "believe that at least some control resides within themselves" and *Externals* as individuals which "believe that their outcomes are determined by agents or factors extrinsic to themselves, for example, by fate, luck, (or) chance." A person's locus orientation has been found to be significantly related to a wide variety of perceptions and behaviors (see MacDonald 1972 for a review). One can logically conclude that an external locus respondent, by their very nature, is more likely to attribute the responsibility for the accident to situational influences. Thus we hypothesize:

H3e: A positive relationship exists between respondent external locus of control and assignment of responsibility to the situation.

We propose risk aversion is positively related to ARS. Prospect theory (Kahneman and Tversky 1979, 1984; Tversky and Kahneman 1981), suggests that the "riskiness" of a situation substantially affects the perceiver's evaluation of that situation. Logically, a risk averse person is likely to perceive a wide variety of situations as innately dangerous. Conversely, individuals with little risk aversion sometimes actually engage in "sensation seeking" (Zuckerman 1971). Sensation seekers do not actually perceive these situations or their activities as dangerous, or believe that any possible negative outcome will always happen to someone else. Therefore, a risk averse person would be more likely to attribute an accident to dangerous situational forces. Thus we hypothesize:

H3f: A positive relationship exists between respondent risk aversion and assignment of responsibility to the situation.

Unanticipated Consequences. Weiner (1982, 1985b) has suggested that unexpected events are likely to result in *spontaneous attributional activity.* Therefore the final factor hypothesized to affect ARM and ARS is unanticipated consequences. We hypothesize that the more unanticipated the injury is, the stronger the attribution of blame to the product/manufacturer. Conversely, unanticipated events will result in less attribution to the situation.

The *Just World Hypothesis* (Lerner and Miller 1978), posits the world is, in general, orderly and an individual's pursuits will not be blocked by environmental interference. According to this theory, unusual (unanticipated) events "require for their occurrence a greater causal role by the victim or perpetrator" (Kelley and Michela 1980, p. 476). Therefore respondents will be highly motivated to assign the responsibility for such an incident to someone or something in order to reduce the perceived causal role of the situation. Furthermore, Weiner (1982) claims that negative events, such as a product injury, are likely to lead to internal rather than external attributions. In the present

study, higher levels of UC should increase attributions of blame toward the manufacturer (i.e. the manufacturer must have failed in their duty to provide a safe product or to make the consumer aware of the danger). Thus we hypothesize:

H2j: A positive relationship exists between unanticipated consequences and assignment of responsibility to the manufacturer.

H3g: A negative relationship exists between unanticipated consequences and assignment of responsibility to the situation.

Summary. We propose that consumers reading about product liability cases in the media will naturally attempt to draw causal inferences regarding the accident. When serving as jurors, consumers are required to critically examine the information and assign responsibility for the injury. In both roles, information about the firm and the consumer's personal biases and motivations are hypothesized to influence the particular attribution made. In this study, we will test seventeen specific hypotheses regarding the assignment of responsibility for the plaintiff's injury. These relationships are depicted in Figure 2.8.

Affective Reaction

The third set of dependent measures are respondent affective reactions. As depicted in the research model, affect is hypothesized to mediate the relationship between the causal ascriptions and behavioral outcomes - in this case a jury award. This sequence of events is consistent with a multitude of work by Weiner (1974, 1976, 1985a; Weiner, Frieze, Kukla, Reed, Rest, and Rosenbaum 1971; Weiner, Russell, and Lerman 1978) and corroborating evidence provided by Ickes and Kidd (1976). In Weiner's (1985a, p. 548) words, "dimensions of causality affect a variety of common emotional experiences...and affect, in turn, (is) presumed to guide motivated behavior." While literally hundreds of potential affective reactions are possible (see Weiner et al. 1978, pp. 68-69), the affective measures incorporated in the model are designed to

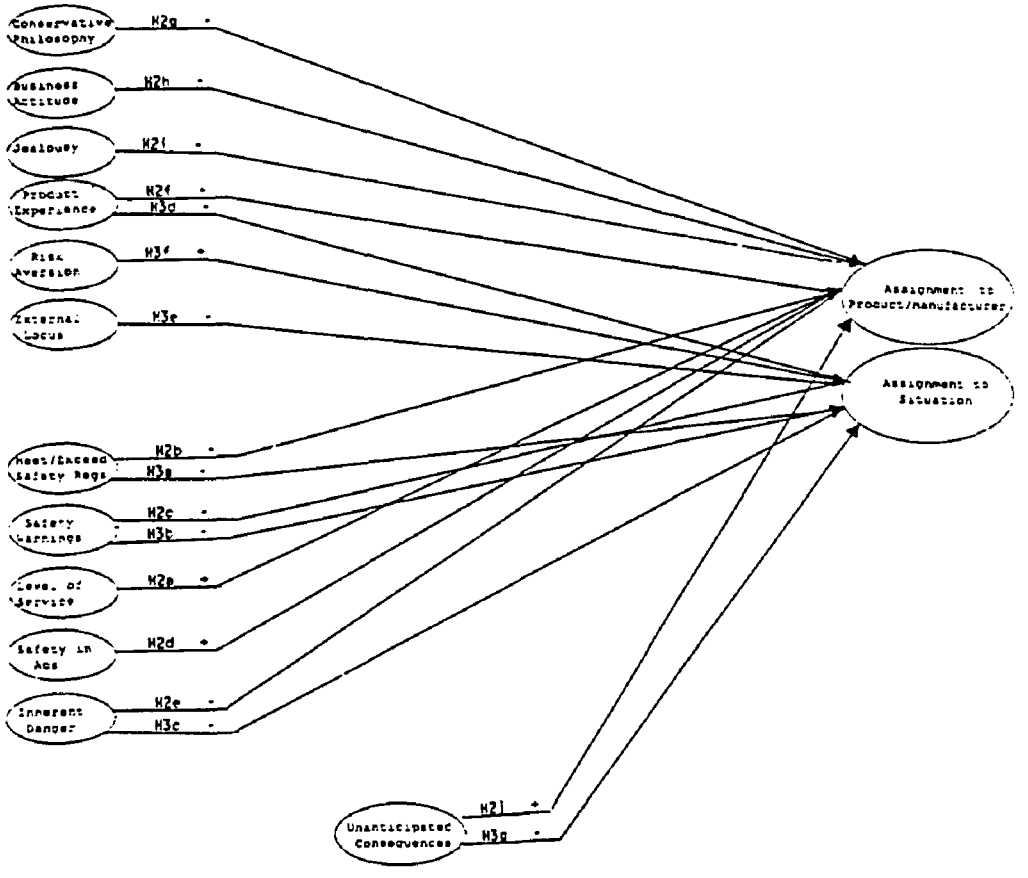

Figure 2.8

Model for Predicting Assignment of Responsibility

capture general feelings likely to be evoked by the experimental stimuli.

Batson and Coke (1981; Batson, Duncan, Ackerman, Buckley, and Birch 1981; Coke, Batson, and McDavis 1978) have developed and refined measures of "emotional responses to seeing another person suffer" (Batson, O'Quin, Fultz, Vanderplas, and Isen 1983, p. 706). Specifically, *personal distress* and *empathy* are hypothesized as affective mediators in the proposed attributional model. These measures are directed toward both of the principal parties (plaintiff and defendant) involved in the liability process. Thus four separate affective measures - empathy toward the plaintiff (EP), distress toward the plaintiff (DP), empathy toward the defendant (ED), and distress toward the defendant (DD) - are included in the model.[1] Details regarding the operationalization of these constructs are provided in Chapter Three.

Due to the nature of the experimental stimuli, with the plaintiff experiencing a severe product-related injury and the manufacturer responsible for at least producing that product, empathy toward the plaintiff (a positive emotion) and distress toward the manufacturer (primarily a negative reaction) are expected to be the dominant emotions. Nonetheless, an investigation into the particular emotional reactions elicited by a product liability scenario must be considered highly exploratory. The predictors of affective reactions include unanticipated consequences, the assignment of responsibility variables, and eight individual difference constructs.

Unanticipated Consequences and Assignment of Responsibility. UC is hypothesized to be positively related to EP and DD; ARM negatively

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[1] Technically speaking, distress *created by* the defendant (or plaintiff) is probably more precise than distress *toward* the defendant (or plaintiff), a distinction discussed in greater detail later in this section. For consistency, however, the term *toward* will be utilized for both affective responses.

related to ED and positively related to EP, DP, and DD; while ARS is hypothesized to be positively related to EP and ED. These propositions are primarily deduced from Weiner's (1985a) claim that the "controllability" of an event is associated with feelings of *anger* and *pity*; emotions which closely correspond to *personal distress* and *empathy* respectively. Specifically, negative events that could (or should) have been controlled elicit anger (distress), while uncontrollable events are associated with pity (empathy).

The intuitive logic behind these relationships can be illustrated by examining excuse behavior. For example, consider your reaction to a student who failed to turn in a term paper when due and asks for an extension. "My hard disk crashed on my computer and I lost everything," an uncontrollable cause, is certain to elicit more pity than "I spent the weekend studying for my economics exam," a controllable one. Or, if you fail to purchase an anniversary present, "I thought of the perfect gift but three stores were out of stock" is a far better bet to diffuse the anger than the controllable (but perhaps honest) excuse of "I forgot."

Both UC and ARS can be considered uncontrollable. If an event is truly unanticipated by the user, how could it be controlled? Since the plaintiff is the victim of the unanticipated act, pity or empathy toward that individual is a likely emotional outcome. Conversely, considering the *Just World Hypothesis* and the fact that the defendant did have control over the production of the good, anger (distress) toward the manufacturer can be expected. Thus we hypothesize:

H4a: A positive relationship exists between unanticipated consequences and empathy toward the plaintiff.

H7a: A positive relationship exists between unanticipated consequences and distress toward the defendant.

By the same reasoning, an event which is attributed to situational factors is out of both the plaintiff's and manufacturer's volitional

control. They are both viewed as "victims" in this situation. Therefore, empathy toward both parties is expected. Thus we hypothesize:

H4b: A positive relationship exists between assignment of responsibility to the situation and empathy toward the plaintiff.

H6a: A positive relationship exists between assignment of responsibility to the situation and empathy toward the defendant.

Assignment of responsibility to the manufacturer infers controllability (Shaver 1985). If the consumer/juror perceives the manufacturer is responsible for the injury, it is likely s/he also feels the manufacturer had the ability to control the event. Since "the perceived controllability of a cause for a negative outcome in part determines whether anger or pity is directed toward another" (Weiner 1985a, p. 562), ARM is expected to heighten feeling of personal distress toward both parties. Furthermore, empathy toward the defendant is anticipated to be reduced. Conversely, the plaintiff is viewed as a victim lacking control. According to Hoffman (1982, p. 296), "It is only when the cues indicate that...the victim had no control that the...transformation of empathetic into sympathetic distress may apply." The result is empathy toward the plaintiff. Thus we hypothesize:

H5a: A positive relationship exists between assignment of responsibility to the manufacturer and distress toward the plaintiff.

H7b: A positive relationship exists between assignment of responsibility to the manufacturer and distress toward the defendant.

H4c: A positive relationship exists between assignment of responsibility to the manufacturer and empathy toward the plaintiff.

H6b: A negative relationship exists between assignment of responsibility to the manufacturer and empathy toward the defendant.

Personal Variables. In addition to unanticipated consequences and assignment of causality, the research model includes individual

difference variables as predictors of affective reactions. We propose that some individuals are naturally more emotional in their responses to seeing another suffer and personal characteristics and biases will influences these emotions. In particular, respondent sympathy, personal values, locus of control, experience with the product, conservative philosophy, attitude toward business, jealousy, feelings regarding distribution of wealth, and personal income are included as predictors of affective reaction. Again, limited prior research regarding the relationship among these characteristics and emotions results in hypotheses being constructed from deductive logic and analogy.

Sympathy, as a predictor, is perceived as a relatively stable, general personality trait. Sympathetic respondents are inclined to display a high level of emotion across a variety of situations. Therefore, when exposed to the suffering of the plaintiff in the experimental scenario, a sympathetic respondent is likely to feel both empathy and personal distress toward the plaintiff. Thus we hypothesize:

H4d: A positive relationship exists between respondent sympathy and empathy toward the plaintiff.

H5b: A positive relationship exists between respondent sympathy and distress toward the plaintiff.

Rokeach (1973, p. 5) defines personal values as "An enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence." It is Rokeach's *terminal values*, the *desirable end-state of existence*, that we expect to influence respondent affective response. Vinson, Scott, and Lamont (1977) describe terminal values as *global values* and refer to them as "personal values which are of high salience in important evaluations and choices." This statement is consistent with Rokeach's (1973, p. 13) assertion that terminal values are standards employed "to evaluate and judge, to heap praise and fix blame on ourselves and others."

Since terminal values are used "to heap praise and fix blame," they should logically be operant in a juror's role of assessing a product-related injury. Furthermore, as values refer to "personally or socially preferable" end-states of existence, the more strongly held these values the greater the perceived discrepancy between the desired state and the existing state (an injured consumer). This discrepancy is posited to elicit a strong emotional reaction. Specifically, empathy and distress toward the plaintiff are expected to be positively related to values, whereas values are expected to be negatively related to empathy toward the defendant. Partial empirical support for this hypotheses is provided by Darden, DeConinck, Babin, and Griffin (1991) who found personal values to be positively related to sympathy toward the plaintiff in a marketing study. These researchers, however, did not investigate distress toward the plaintiff or either affective reaction directed toward the defendant. Thus we hypothesize:

H4e: A positive relationship exists between respondent terminal values and empathy toward the plaintiff.

H5c: A positive relationship exists between respondent terminal values and distress toward the plaintiff.

H6c: A negative relationship exists between respondent terminal values and empathy toward the defendant.

The research model depicts a positive relationship between external locus of control and empathy toward both the plaintiff and defendant. Support for this hypotheses can be constructed from the locus of control literature, the *false consensus effect*, and Weiner (1985a) and Hoffman's (1982) work on emotional reaction to casual attributions.

"Internals...believe that at least some control resides within themselves...Externals, on the other hand, believe that their outcomes are determined by agents or factors extrinsic to themselves, for example, by fate, luck, (or) chance" (MacDonald 1973, p. 169). In other words, respondents on the external end of the scale believe their fate

is largely uncontrollable. Assuming the *false consensus effect* (Ross, Greene, and House 1977), a respondent should feel that other parties also lack control over their fate. Since Weiner (1985a) and Hoffman (1982) posit that uncontrollable negative events are related to pity and empathy, we conclude that respondent external locus of control should lead to empathy toward both parties involved. Thus we hypothesize:

H4f: A positive relationship exists between respondent external locus of control and empathy toward the plaintiff.

H6d: A positive relationship exists between respondent external locus of control and empathy toward the defendant.

Experience with the product is anticipated to relate to empathy toward the plaintiff and distress toward the defendant. A consumer/juror who uses the product which inflicted the injury would have a motivational bias to attribute the accident to the plaintiff (see Folkes and Kotsos 1986; and H2f & H3d). Nevertheless, a respondent possessing a high level of experience with the product would be familiar with the dangers and possible consequences of product usage. When a juror that uses the product realizes that the "possible consequences" actually occurred to someone, they are likely to display empathy toward that individual. In addition, this respondent should feel personal distress that s/he might encounter the same fate. Thus we hypothesize:

H4g: A positive relationship exists between respondent experience with the product and empathy toward the plaintiff.

H7c: A positive relationship exists between respondent experience with the product and distress toward the defendant.

A conservative philosophy and positive attitude toward business are hypothesized to increase levels of empathy toward the defendant while decreasing respondent distress. As Folkes (1988, p. 554) has discussed, *self-labelling effects* result in an individual behaving as they label themselves. Due to the personal involvement with the *liked*

entity (Bell, Wicklund, Manko, and Larkin 1976), a conservative juror and/or one with a positive attitude toward business should display an emotional attachment to the defendant in a product liability court case. In the current study, the pro-defendant affective responses that would result are increased empathy toward the defendant and reduced personal distress. Thus we hypothesize:

H6e: A positive relationship exists between respondent conservative philosophy and empathy toward the defendant.

H7d: A negative relationship exists between respondent conservative philosophy and distress toward the defendant.

H6f: A positive relationship exists between respondent attitude toward business and empathy toward the defendant.

H7e: A negative relationship exists between respondent attitude toward business and distress toward the defendant.

We propose jealousy, as a general personality trait, is negatively related to empathy toward both the plaintiff and defendant, and positively related to distress toward the defendant. A respondent jealous of another's good fortune, and viewing themselves as the victim of bad breaks, is likely to respond emotionally to the experimental stimuli. First, we propose a jealous consumer/juror would display less empathy toward the plaintiff. Initially, this relationship may appear counter-intuitive. However, while the juror might perceive the injury as unfortunate, s/he would be jealous that the plaintiff stands to reap a financial windfall whereas the respondent remains in the same inauspicious circumstances. At the extreme, a jealous individual could even perceive the plaintiff's injury as a blessing in disguise - a ticket to a better life! Along the same line, the jealous respondent, comparing his situation to that of "big business," would hardly be able to muster any sympathy toward the defendant. In fact, a feeling of distress toward the manufacturer, appearing to possess all the advantages, is a likely affective response. Thus we hypothesize:

H4h: A negative relationship exists between respondent jealousy and empathy toward the plaintiff.

H6g: A negative relationship exists between respondent jealousy and empathy toward the defendant.

H7f: A positive relationship exists between respondent jealousy and distress toward the defendant.

The final personal characteristics hypothesized to influence affective reaction are the respondent's personal income and attitude toward distribution of wealth. These two factors are expected to evoke opposing emotions. An individual in favor of a more equal distribution of wealth in society would perceive an undesired disparity between the disadvantaged plaintiff and the immense wealth of large corporations. In his/her role as a juror in a product liability trial, s/he would possess the opportunity to partially rectify this unequal distribution of wealth. Witnessing the suffering of the plaintiff, we posit an emotional reaction of increased empathy toward the plaintiff and reduced empathy toward the defendant. Thus we hypothesize:

H4i: A positive relationship exists between respondent attitude toward distribution of wealth and empathy toward the plaintiff.

H6h: A negative relationship exists between respondent attitude toward distribution of wealth and empathy toward the defendant.

Conversely, higher levels of personal income of the consumer/juror would result in reduced empathy toward the plaintiff and greater empathy toward the defendant. Personal income is positively associated with level of education and organizational experience (Martineau 1958; Engel, Blackwell, and Miniard 1986). Such respondents are likely to be more empathetic toward the defendant and less empathetic toward the plaintiff in a trial situation. Empirical research (Darden, et al. 1991) has shown support for the hypothesized negative relationship between income and empathy toward the plaintiff. Thus we hypothesize:

H4j: A negative relationship exists between respondent income and empathy toward the plaintiff.

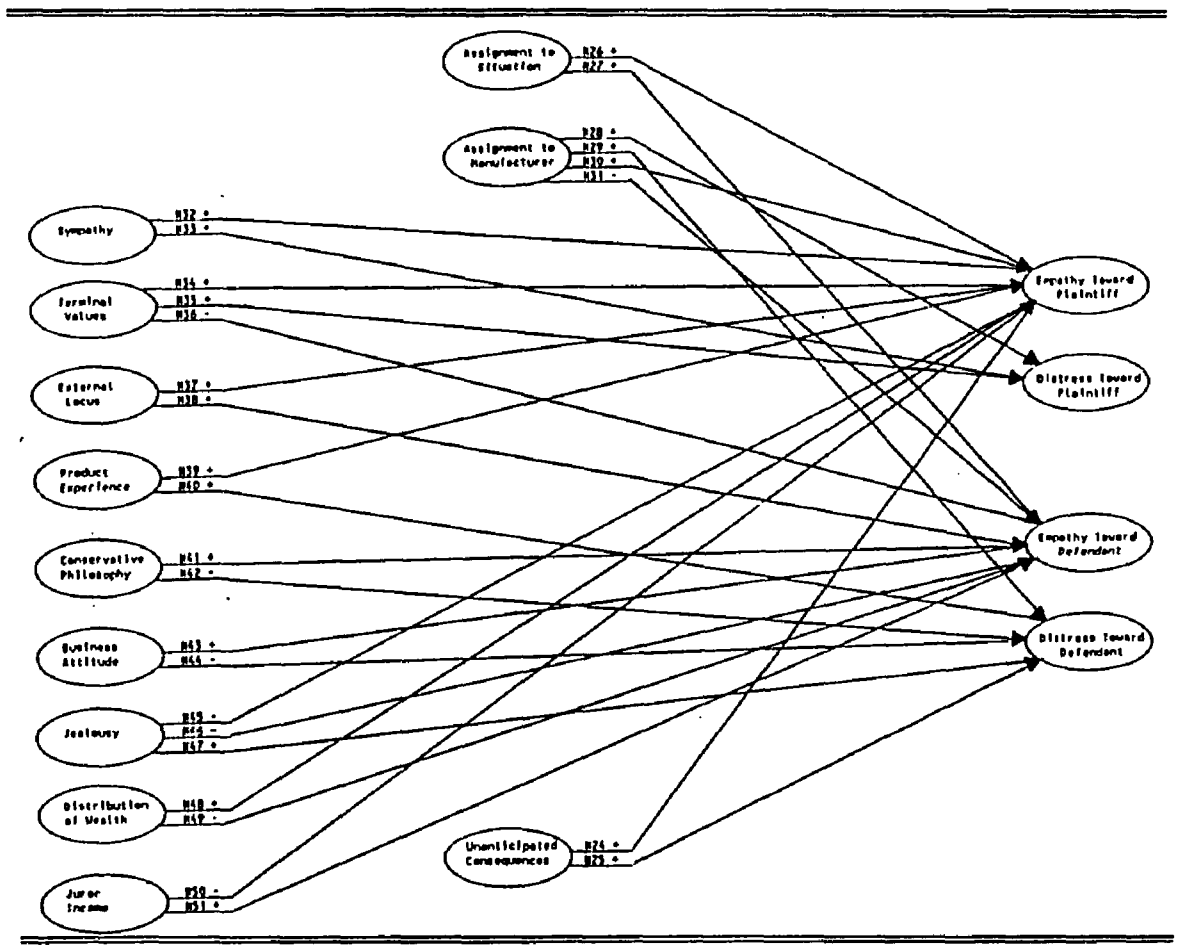

Figure 2.9

Model for Predicting Affective Reaction

H6i: A positive relationship exists between respondent income and empathy toward the defendant.

Summary. Based on considerable theoretical development and empirical research by Weiner, we have included affective reactions as mediators between assignment of responsibility and individual difference characteristics and jury award. Specifically, *personal distress* and *empathy* are incorporated in the research model. The twenty-eight hypotheses predicting affective reaction are illustrated in Figure 2.9.

Jury Award

The last dependent variable in the proposed model is jury award. Jury award represents the final, global evaluation of the product liability scenario. Jury award is hypothesized to be a function of unanticipated consequences, assignment of responsibility, and affective reactions to the experimental stimuli.

Unanticipated Consequences. UC is expected to be positively related to jury award - the more unanticipated the injury the higher the award. The disconfirmation paradigm has been widely utilized to explain consumer satisfaction (see Churchill and Surprenant 1982). Specifically, when outcomes fall short of expectations (negative disconfirmation) satisfaction is reduced. In investigations of product failure, Pyszczynski and Greenberg (1981) found that attributions of causality were greatest when expectancies were disconfirmed and Kamins and Assael (1987) found that subjects more critically evaluated the product when their experience failed to meet the firm's promises. In this study, unanticipated consequences captures not only disconfirmation, but the proposed more extreme reaction due to negative outcomes that are not even anticipated. We propose that unanticipated consequences will not only influence assignment of responsibility (see H2j & H3g) and affective reactions (see H4a & H7a), but also yield a direct positive influence on jury award. Thus we hypothesize:

H8a: A positive relationship exists between unanticipated consequences and jury award.

Assignment of Responsibility. The research model depicts a positive relationship between ARM and jury award. In addition, a negative relationship between ARS and jury award is hypothesized.

A sense of justice and the legal philosophy of negligence dictate that the party responsible for the accident should bear the cost. Under negligence, the actions of both the plaintiff and defendant are considered in establishing fault. Although most product liability cases are actually brought under the philosophy of strict liability, we propose that the legally naive juror actually applies the balancing principles of negligence. In this case, the greater the responsibility of the manufacturer, the higher the award the plaintiff should receive. Assigning the responsibility to situational factors, on the other hand, infers less responsibility of the manufacturer which should correspond to a reduced jury award. Thus we hypothesize:

H8b: A positive relationship exists between the assignment of responsibility to the manufacturer and jury award.

H8c: A negative relationship exists between the assignment of responsibility to the situation and jury award.

Affective Reaction. The final proposed predictors of jury award are the affective responses of empathy and personal distress. Batson et al. (1983, p. 706) define *empathy* as "an altruistic desire to reduce the distress of the person in need" and *personal distress* as "an egoistic desire to reduce one's own distress." Batson et al. (1983, p. 707) argue that while these emotions are distinct, "any measures of them will most certainly be correlated positively" for three reasons. First, both are evoked by exposure to another's suffering, so situational variables affecting one are also likely to affect another. Second, both are emotions which would likely be affected by individual difference

characteristics. Finally, the use of self-report adjective rating scales can result in response-set biases.

In the opinion of McDougall (1908), the critical distinction between these two affective responses is that they lead to very different motivations to help. The *tender emotion* (empathy), he argues, results in altruistic motivations, whereas *sympathetic pain* (personal distress) leads to egoistic motivations. In other words, a person experiencing empathy takes action to assist the person and resolve their current situation. An individual experiencing personal distress seeks to minimize the discomfort they are experiencing due to exposure to the suffering. As an example, upon viewing a blind person begging for money, empathy results in a donation, or similar effort, to reduce the plight of the suffering. If personal distress is the operant emotion, minimizing exposure to the beggar by walking on the other side of the street is a likely response.

Batson, Coke, and their colleagues (Coke, Batson, and McDavis 1978; Batson and Coke 1981; Batson, Duncan, Ackerman, Buckley, and Birch 1981; Batson et al. 1983) hypothesize that empathy will lead to helping behavior regardless of situational factors. On the other hand, those experiencing personal distress will attempt to help only when they are unable to "escape" exposure to the victim's suffering. These researchers have empirically tested their hypotheses by exposing subjects to experimental stimuli, measuring their emotional responses, and manipulating the degree of difficulty of avoiding the victim's need. The results consistently support the hypotheses; helping behavior arises from empathy regardless of situational constraints, while personal distress only leads to helping behavior when escape is difficult.

The research of Batson, Coke, and their colleagues leads us to hypothesize that empathy will lead to helping behavior in the current study. Specifically, empathy toward the plaintiff will increase jury award while empathy toward the defendant will reduce jury award.

Studies of courtroom decisions (Thomas 1983; Foote 1984) have suggested that sympathy does, in fact, impact jury decisions. Darden et al. (1991) have also found support for this relationship in an experimental marketing study. Thus we hypothesize:

H8d: A positive relationship exists between empathy toward the plaintiff and jury award.

H8e: A negative relationship exists between empathy toward the defendant and jury award.

Distress is also hypothesized to affect jury award. Since "escaping" the victim's suffering is not possible (a juror can not avoid exposure to the plaintiff's injuries), the juror is expected to seek another means of resolving his/her personal distress. In this case, rather than seeking to ease the suffering of the victim, the respondent can "punish" the party creating his/her personal distress by increasing or decreasing the jury amount. Personal distress brought on by the actions of the manufacturer would lead to increased jury award. While distress due to the plaintiff's actions is likely to be minimal, such an emotion would result in a lower jury award. Thus we hypothesize:

H8f: A negative relationship exists between distress toward the plaintiff and jury award.

H8g: A positive relationship exists between distress toward the defendant and jury award.

Summary. Jury award is the final variable in the research model of the product liability process. We propose that jury award is determined by a combination of unanticipated consequences, assignment of responsibility, and affective reaction. The seven predictors and their hypothesized relationship with jury award are shown in Figure 2.10.

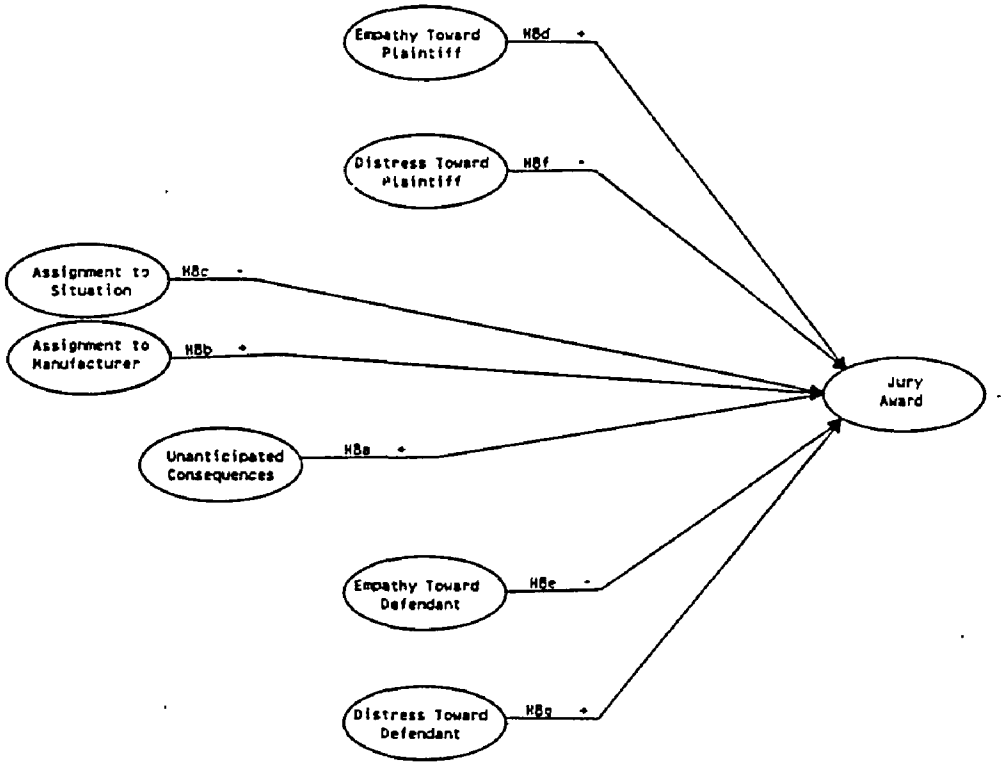

Figure 2.10

Model for Predicting Jury Award

Summary

Several hypotheses were developed to test the proposed research model. These hypotheses are not intended to represent a fully specified model of the product liability process, but do substantially extend previous liability models. The variables and relationships to be tested by the hypotheses can be thought of as a "sample" of the possible constructs and relationships that could be derived from the general model presented in Figure 2.4.

Many, if not most, of the hypotheses must be considered exploratory as there is limited prior empirical research investigating these particular constructs. For example, to the author's knowledge the manipulations incorporated in this study have not been tested empirically. Furthermore, these factors do not fall neatly into the *a priori* groups defined by Weiner's (1980) causal dimensions, which have been the focus of the product failure research discussed earlier. That is, focus groups revealed that a wide deviation in the perceived locus, stability, and controllability of these factors exist, which is likely to be true of many of the factors affecting product liability court cases. In addition, the effect of the individual difference characteristics on causal attributions has received limited empirical investigation. Therefore, the hypotheses are based on elements of disconfirmation, prospect, and attribution theories, as well as qualitative research and deductive logic. Empirically testing the hypotheses will provide substantial new insight into the liability process.

Summary

Chapter Two provided a review of the relevant background literature, developed a general model of the product liability process, and presented the research hypotheses. First, an historical review of product liability legislation was presented to provide the reader the knowledge necessary to understand the legal parameters of product

liability litigation. In particular, the legal review sought to familiarize the reader with the legal doctrines of *trespass*, *negligence*, *strict liability*, and *warranty*, as well as illustrate the fact that liability laws tend to be isomorphic with society's desires. Thus consumer perceptions of liability scenarios hold direct relevance for public policy formation.

Second, liability research appearing in the marketing discipline was presented. Research taking both the *case analysis* and *behavioral* approaches to studying product liability was covered. This section illustrated the impact of product liability on the marketing discipline, identified constructs for inclusion in the research model, and indicated areas in need of additional investigation. Following the marketing literature, the theoretical foundation for the current research was presented. Disconfirmation, prospect, and attribution theory were all briefly reviewed and the implications for the present study discussed.

After the review of the legal and marketing literature and the discussion of the theoretical base, the general model of the liability process was presented. Based primarily on the work of Shaver, Weiner, and Kelley and Michela, a model containing outcome, antecedents, causal inferences, affective reactions, and behavioral consequences was constructed. Next, the process of identifying the specific factors and characteristics that comprise each element of the general model was discussed. Finally, the research hypotheses were delineated. Fifty-eight hypotheses were developed to test the general model of the product liability process and incorporated into the research model. The methodology necessary to test these hypotheses is presented in Chapter Three.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

A general introduction to the study, including the importance of the research topic to marketing managers and consumers; the objectives of the study; and the anticipated contributions of the research are presented in Chapter One. Chapter Two reviews the relevant background literature, develops a theoretical model of the product liability process, and poses the specific hypotheses to be tested. Chapter Three describes the methodology necessary to generate the data and test the research hypotheses. The following sections will:

(1) Describe the development of the legal protocols, including the operationalization of the experimental factors, the experimental design, and incorporation of the manipulations into experimental scenarios.

(2) Describe the research constructs, the operationalization of those constructs, and the development of the survey instrument.

(3) Discuss the population, required sample size, and procedure for collecting the data necessary to test the research hypotheses.

(4) Present the statistical techniques for analysis of the data.

The Development of Experimental Protocols

Chapter Two discusses several firm related factors that might influence how consumer/jurors assess product-related injuries. Five of these factors are included in the research model:

- Inherent danger of the product
- Product safety warnings
- Safety in advertisements
- Meet/exceed governmental safety requirements
- Level of service

These factors must be operationalized and incorporated into experimental scenarios in order to determine consumer/juror evaluation of the factors. The following section discusses the selection of the products, the operationalization of the other factors, and the construction of the protocols.

Selection of Products

The first step in constructing the experimental scenarios was to operationalize the inherent danger manipulation. To accomplish this, two products perceived as divergent in their ability to inflict bodily harm, but comparable on other dimensions and compatible with the remaining manipulations, had to be identified. Rethans and Albaum (1981) have investigated the perceived risk of use for a wide variety of products. These researchers report that consumers considered the "risk acceptability" of hammers to be the highest of the 29 products evaluated (Rethans and Albaum, 1981, p. 508). Conversely, power lawn mowers, sunlamps, skateboards, and fireworks were rated as the most dangerous. Of these products, power lawn mowers were judged to be most similar to

the hammer in other aspects, such as utility of the product and familiarity to the general population. Therefore a hammer and a power lawn mower were tentatively selected as products to represent the inherent danger manipulation.

Initial testing of the perceived danger of these products was conducted with a convenience sample of 42 students at Louisiana State University. The respondents were asked to evaluate the level of danger associated with the use of each product on a seven-point scale anchored by "very dangerous" and "very safe." T-tests for differences between means indicated a significant difference in relative levels of perceived danger ($p < .05$). However, in absolute terms, both products were viewed as being safe (both means > 4.00). Consequently, a more "dangerous" product was needed.

Based on focus group discussions, a gas-powered weed eater with a fixed cutting blade was selected for additional testing. It was believed that a weed eater possesses characteristics very similar to a lawn mower, but might be perceived as more dangerous. To test this, a second group of students (47) evaluated the two products in the same manner as before. The manipulation checks revealed both a statistical difference between means ($p < .01$), as well as a larger absolute difference. Therefore, a hammer and a weed eater were chosen to represent the "low" and "high" levels of the inherent danger factor respectively.

Developing Legal Protocols

Legal protocols are a widely accepted research tool in psycholegal research (e.g., McGlynn, Megas, and Benson 1976; Alexander and Becker

1978; Bray and Kerr 1982; Clary and Shaffer 1985; Johnson and Drobny 1985; Lyons and Regina 1986; Casper, Benedict, and Kelly 1988). According to Alexander and Becker (1978, p. 95), protocols provide the researcher "a rather precise estimate of effects due to changes in combinations of variables as well as individual variables on corresponding changes in respondent attitudes." Furthermore, other researchers (e.g., Bray and Kerr 1982; Van Koppen and Ten Kate 1984) have claimed legal protocols permit a high level of control over experimental factors, allowing the researchers to make causal statements. Thus experimental legal protocols were chosen as the method for obtaining a portion of the data.

To develop realistic experimental protocols a large number of actual liability court cases were reviewed. A search of court records uncovered an actual case involving an injury resulting from the use of a claw hammer. In *Chappuis v. Sears Roebuck & Co.* (1978), a young man lost the vision in his left eye when a chip flew off the head of a hammer and struck him in the eye. Based on the head notes of this case, experimental scenarios were constructed incorporating "high" and "low" levels of the other experimental factors. A second scenario was then constructed, but based on an injury caused by a weed eater. All other aspects of the two cases (i.e. type of injury, plaintiff characteristics, and the defendant's reaction) were kept as identical as possible. Two levels of the five manipulations resulted in 32 separate legal protocols. The 2 X 2 X 2 X 2 X 2 full factorial design is illustrated in Figure 3.1.

Inherent Product Danger	Level of Service	Safety in Advertisements	Meet/Exceed Regulations	Warning Labels	Experimental Cell
HAMMER Low Inherent Product Danger	LOW Self-Service Discount Store	LOW Other Features Stressed in Advertisements	MET MINIMUM Regulations	NOT PROVIDED	1
				PROVIDED	2
			EXCEEDED Regulations	NOT PROVIDED	3
				PROVIDED	4
		HIGH Product Safety Stressed in Advertisements	MET MINIMUM Regulations	NOT PROVIDED	5
				PROVIDED	6
			EXCEEDED Regulations	NOT PROVIDED	7
				PROVIDED	8
	HIGH Full-Service Retail Store	LOW Other Features Stressed in Advertisements	MET MINIMUM Regulations	NOT PROVIDED	9
				PROVIDED	10
			EXCEEDED Regulations	NOT PROVIDED	11
				PROVIDED	12
		HIGH Product Safety Stressed in Advertisements	MET MINIMUM Regulations	NOT PROVIDED	13
				PROVIDED	14
			EXCEEDED Regulations	NOT PROVIDED	15
				PROVIDED	16
WEED EATER High Inherent Product Danger	LOW Self-Service Discount Store	LOW Other Features Stressed in Advertisements	MET MINIMUM Regulations	NOT PROVIDED	17
				PROVIDED	18
			EXCEEDED Regulations	NOT PROVIDED	19
				PROVIDED	20
		HIGH Product Safety Stressed in Advertisements	MET MINIMUM Regulations	NOT PROVIDED	21
				PROVIDED	22
			EXCEEDED Regulations	NOT PROVIDED	23
				PROVIDED	24
	HIGH Full-Service Retail Store	LOW Other Features Stressed in Advertisements	MET MINIMUM Regulations	NOT PROVIDED	25
				PROVIDED	26
			EXCEEDED Regulations	NOT PROVIDED	27
				PROVIDED	28
		HIGH Product Safety Stressed in Advertisements	MET MINIMUM Regulations	NOT PROVIDED	29
				PROVIDED	30
			EXCEEDED Regulations	NOT PROVIDED	31
				PROVIDED	32

Figure 3.1

Experimental Design

In experimental designs, subjects are exposed to various conditions posed by the protocols and are expected to react differently to those conditions. To insure the internal validity of this experiment, the manipulations were tested and revised during pretesting as suggested by Aronson and Carlsmith (1968) and Wetzel (1977). The effectiveness of the experimental manipulations in the completed scenarios was assessed by having 64 students read one of the scenarios (2 subjects per cell), then respond to the following questions on a seven-point scale with anchors suited to the manipulation:

(1) How **safe or dangerous** would you consider the product in this case?

(2) Were the **warnings of danger** regarding the product sufficient?

(3) How noticeable was **safety in the advertisements** for the product?

(4) Did the product **meet government safety regulations?**

(5) How much **personal service** did the store where the product was purchased provide?

Perdue and Summers (1986, p. 318) assert that experimenters:

> would like to be able to demonstrate that (1) the treatment manipulations are related to "direct" measures of the latent variables they were designed to alter and (2) the manipulations did not produce changes in measures of related but different constructs."

To accomplish both of these goals, the 64 subjects were collapsed into *high* and *low* groups for each of the experimental manipulations (i.e., 32 for high inherent danger and 32 for low inherent danger). These two categories were then tested for differences in the mean response on all five check questions. This procedure was repeated for all five

manipulations, thus the effectiveness of both the manipulations and any confounding effects between manipulations can be tested (Wetzel 1977, p. 88).

As can be seen in Table 3.1, respondents were able to detect a statistically significant difference between the high and low levels of each of the manipulations (see the **bold** values on the diagonal). However, the analysis also revealed a confounding effect between the manipulation for product safety warnings and those for both safety in advertisements and safety regulations (when classified into high and low groups based on safety warning, an undesired difference existed on these items). The scenarios were then revised in order to strengthen the safety warning manipulation and isolate it from the manipulations for safety in advertisements and safety regulations. After revision, the scenarios were tested with a new group of 96 Louisiana State University students. The results of the second pretest of the experimental manipulations are presented in Table 3.2.

Following revision of the legal protocols, in each case a significant difference was found between mean scores on the appropriate measure, but not the others, suggesting that the manipulations were effective and independent. The scenarios were therefore deemed appropriate for inclusion in the survey instrument. The revised experimental scenarios are presented in Appendix B.

Summary

To summarize, the legal protocols were developed through a multi-step procedure. First, the *inherent danger* experimental factor was operationalized. Products to be used in the scenarios were initially

TABLE 3.1

Results of First Pretest of Experimental Manipulations

Experimental Element	First Pretest									
	Danger		Warnings		Ads		Service		Regulations	
	T Value	Prob.	T Value	Prob.	T Value	Prob.	T Value	Prob.	T Value	Prob.
Inherent Danger	3.15	.006	1.66	.117	1.06	.305	0.49	.633	0.86	.400
Product Safety Warnings	0.53	.600	2.15	.049	0.75	.464	0.97	.346	1.22	.238
Safety in Ads	1.70	.108	2.80	.008	2.18	.045	0.98	.343	0.09	.932
Level of Service	0.91	.379	0.33	.747	1.07	.302	4.00	.001	0.66	.519
Exceeded Safety Regulations	0.41	.691	2.20	.034	0.46	.649	0.98	.343	3.14	.009

TABLE 3.2

Results of Second Pretest of Experimental Manipulations

Experimental Element	Second Pretest									
	Danger		Warnings		Ads		Service		Regulations	
	T Value	Prob.	T Value	Prob.	T Value	Prob.	T Value	Prob.	T Value	Prob.
Inherent Danger	4.13	.000	1.22	.231	1.15	.259	0.48	.634	0.52	.605
Product Safety Warnings	0.82	.419	4.21	.000	1.16	.253	0.14	.888	1.05	.300
Safety in Ads	0.98	.344	0.80	.430	3.17	.003	0.32	.749	1.09	.280
Level of Service	1.03	.309	0.11	.915	0.85	.398	4.02	.000	0.22	.825
Exceeded Safety Regulations	0.44	.661	1.52	.138	0.12	.907	0.30	.767	3.44	.002

identified based on earlier research investigating their "risk acceptability." Following pretesting, a claw hammer and gasoline-powered weed eater were selected. Second, actual product liability court cases were reviewed to identify a case suitable for incorporating the experimental factors. Third, the remaining four experimental factors were operationalized within a written scenario based on the court case. Finally, the effectiveness and potential confounding effects of the manipulations were tested and the protocols revised. Manipulation checks of the revised protocols indicated the manipulations were effective and without confounding effects.

Operationalization of Constructs

The constructs comprising the theoretical model can be categorized as (1) firm-related variables, (2) individual difference characteristics of the respondent, and (3) respondent reactions to the experimental stimuli (dependent variables). The firm-related variables (experimental manipulations) and their development and pretesting were discussed in the previous section. This section will discuss the source and/or development of the measures of the following individual difference variables and dependent measures:

Individual difference characteristics of the respondent:

(1) Liberal/conservative political philosophy
(2) Locus of control
(3) Risk aversion
(4) Experience with the product
(5) Sympathy
(6) Attitude toward business
(7) Distribution of wealth
(8) Jealousy
(9) Personal values
(10) Age
(11) Gender
(12) Income

Dependent Measures:

(1) Unanticipated consequences
(2) Assignment of responsibility for the incident
(3) Empathy toward plaintiff
(4) Distress toward plaintiff
(5) Empathy toward defendant
(6) Distress toward defendant
(7) Jury award

Reliability and Validity

For the results of this study to be of any value, the items used to measure unobservable constructs must be accurately assessing the attitudes, feelings, and personality traits they are purported to measure. To assess the respondent's age, occupation, or income is a simple matter; to measure someone's level of risk aversion, locus of control, or sympathy is something else. To ensure these constructs are measured accurately, reliable and valid survey items must be employed.

Reliability has been defined as the degree to which measures are free from random or chance error (Peter 1979). Reliability is concerned with consistency. In other words, that measures repeated across a variety of samples and situations will yield consistent results. Three methods are available for assessing the reliability of a measurement scale: test-retest, alternative forms, and internal consistency. In the present research, as in the vast majority of marketing studies (Peter 1979), internal consistency will be the criterion employed to assess reliability. More specifically, coefficient alpha (Cronbach 1951) will be used to determine the internal consistency for the multi-item measures. Alpha was selected as the technique for estimating reliability because (1) it is the most common measure of reliability

appearing in the marketing literature (Peter 1979) and (2) "even though potentially there are important sources of measurement error that are not considered by coefficient alpha, it is surprising what little difference these sources of measurement error usually make" (Nunnally 1978, p. 230).

Unfortunately, no absolute standard has been established for what constitutes an "acceptable" level of reliability. Perhaps the most frequently cited source regarding standards for the assessment of reliability is Nunnally (1978). Nunnally (1978, p. 245) suggests that alpha levels for basic research "on predictor tests or hypothesized measures of a construct" of .70 are acceptable, and that increasing reliability "much beyond .80 is often wasteful of time and funds." Nunnally's guidelines appear to have been adopted by the marketing discipline. For example, in Peter's (1979) survey of reliability in the marketing literature, the median internal consistency reliability (typically Cronbach's alpha) reported was .72. Furthermore, the primary method of increasing reliability, adding additional test items, directly conflicts with the scientific goal of parsimony (see Zeller and Carmines 1980). Based on this information, measurement scales developed for the study attempted to achieve internal consistency exceeding .70 with the fewest number of items per construct.

To show that a measure is reliable is a necessary, but not sufficient, step in ensuring the value of the research results. These measures must also be shown to be valid. Validity is concerned with accuracy. In other words, that differences in observed scores are due to true differences in that characteristic and nothing else. Thus,

validity refers to the degree to which items actually measure that construct they claim to be measuring.

Validity commonly is evaluated at three levels: content validity, criterion-related validity, and construct validity. Content, or face validity, is an assessment of how fully the measures capture the domain of interest. According to Zeller and Carmines (1980, p. 78), achieving content validity is a two step process: (1) specify the domain of interest then (2) select and/or compose items related to that domain. Determining if a measure has achieved content validity, however, is subjective. In Nunnally's (1978, p. 93) words, "inevitably content validity rests mainly on appeals to reason regarding the adequacy with which important content has been sampled and on the adequacy with which the content has been cast in the form of test items." For the measures utilized in this study, content validity was addressed by having several knowledgeable colleagues evaluate the adequacy of the test items.

Criterion-related validity is the degree to which a measure is related to the criterion variable of interest. Typically, a statistically significant correlation between the score on the test items and the criterion variable is provided as evidence of criterion-related validity (c.f., Lundstrom and Lamont 1976; Szybillo, Binstock, and Buchanan 1979). Thus criterion validity is solely determined by the degree of correspondence between the measure and its criterion. In this study, criterion-related validity is shown when individual hypotheses are supported.

Construct validity is concerned with the interrelationship among constructs (Peter 1981). Cronbach (1951) notes that construct

validation is an ongoing process of investigation and development of ever more complex "nomological networks." Construct validity exists "when an investigator believes his instrument reflects a particular construct to which are attached certain meanings" (Cronbach and Meehl 1955). Zeller and Carmines (1980) claim construct validation consists of three steps: (1) theoretical relationships between constructs must be specified, then (2) empirical relationships between the measures of the constructs are examined, and finally (3) empirical evidence is interpreted in terms of how it clarifies the construct validity of the particular measure. Thus construct validation is theory laden and is established only through a complex network of hypotheses and relationships. In this study, construct validity is provided by empirical evidence supporting the theoretical model of the liability process.

Scale Development

Measurement scales for several constructs included in this study had to be developed and/or revised. The development of these scales followed the multi-step methodology (see Figure 3.2) presented by Churchill (1979).

First, the domain of the constructs were specified by reviewing the relevant literature. Second, an initial bank of test items were selected from previously published scales or composed by the author to represent the construct. These items were then reviewed and refined by colleagues. Additional items were developed to capture the entire domain of the construct, poorly worded items were revised, and redundant

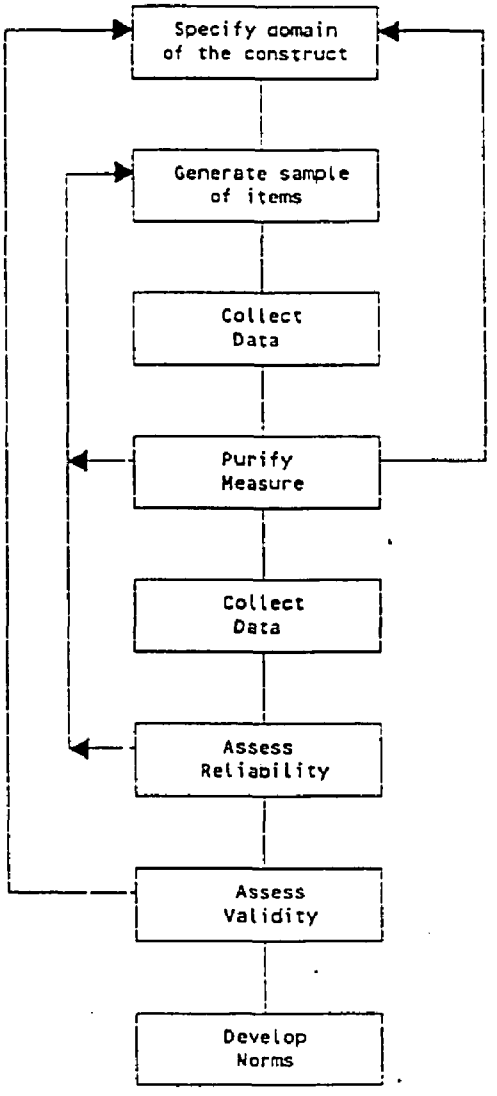

Figure 3.2

Procedure for Developing Marketing Measures

items were eliminated. Third, the revised items were incorporated into a pretest instrument (see Appendix A) and evaluated by 430 undergraduate students on a five-point Likert scale. Fourth, the pretest data were analyzed to determine the dimensionality and reliability of the constructs. Initially, factor analysis was conducted on the pretest data and items not loading on the hypothesized factor and those with split loadings (greater than .30 on a second factor) were eliminated from further analysis. The item-to-total correlations for the remaining items comprising each hypothesized measurement scale were calculated, and items with corrected item-total correlations less than .50 (see Bearden, Netemeyer, and Teel 1989) were deleted. Next, principal components analysis of each scale was conducted to insure that each item loaded highly on a single component and that component accounted for a substantial portion of the total variance (see Carmines and Zeller 1979). Finally, internal consistency reliability (coefficient alpha) was calculated for the refined constructs.

Following this purification process, the scale items for each construct were evaluated again by the author and colleagues. The wording for those items with marginal item-to-total correlations was revised. If the construct did not display a coefficient alpha of at least .70, additional items were composed. All scales were incorporated into a revised pretest instrument (see Appendix C) and evaluated by a second pretest sample of 238 students from two large state universities. Data from the second pretest was then analyzed to determine dimensionality and reliability.

Each of the individual difference variables and dependent measures are discussed separately below. The table for each construct presents the actual scale items and loadings from principal components analysis and reliability estimates based on data from the second pretest. The results demonstrate that all scale items correlate highly with a single factor (no loading is less than .60) and each construct has a Cronbach alpha coefficient exceeding .70. This indicates that each scale possess an acceptable level of internal consistency.

Liberal/Conservative Philosophy

The scale to measure liberal/conservative political orientation is the only two item measure in the study. This scale has been previously used by Darden, Babin, Griffin, and Coulter (1991) and found to be internally consistent (alpha = .81). The results of two pretests also indicate a high degree of reliability (see Table 3.3). It was judged the two items are sufficient for capturing the domain of the construct, parsimonious, and reliable.

Locus of Control

Locus of control is used to assess the respondent's feeling that an event "follows from, or is contingent upon, his own behavior" versus the degree to which he believes the event "is controlled by forces outside of himself and may occur independently of his own actions" (Rotter 1966, p. 3). Of particular importance was assessing the respondent's attitude toward Weiner's (1985a) "locus" dimension of causal attributions. Based on Rotter's (1966) scale, five items were chosen that reflect the domain of the construct as it used in the

TABLE 3.3

Principal Components Analysis for Liberal/Conservative Scale

Scale / Scale Item	Factor Loading	Reliability
Liberal/Conservative Philosophy		.8967
Politically, I would consider myself a conservative	.9048	
I usually vote for the conservative candidate	.9136	

TABLE 3.4

Principal Components Analysis for Locus of Control Scale

Scale / Scale Item	Factor Loading	Reliability
Locus of Control		.7199
I believe that luck plays an important role in my life	.6972	
Most of us are victims of forces that we can't control	.7894	
Often I feel that I have little influence over things that happen to me	.7675	
Many times we might just as well decide what to do by flipping a coin	.7032	

present research. During the development process, one item was deleted and the wording of the other items slightly modified. The revised scale consists of four items all loading on a single factor and possessing internal consistency (see Table 3.4).

Risk Aversion

The risk aversion scale was developed from Zuckerman's (1971) measures of "sensation seeking." This scale is intended to measure the respondent's willingness to engage in - in fact, to "seek out" - risky activities. Five items were selected from the original scale and have performed consistently throughout pretesting (see Table 3.5). The items are included in the research survey instrument as they appear in Table 3.5.

Product Experience

Measures for assessing product experience were developed for the present study. Five items were initially composed and revised by the author and colleagues. The product experience measures reflect the respondent's familiarity with and skill in using the product portrayed in the legal protocols. The results of pretests indicated four of the items loaded on one factor and were highly reliable. Although the fifth item did load on the same factor, the loading was substantially lower than those of the other four items. The results of the second pretest and the four items to be used in the current study are presented in Table 3.6.

TABLE 3.5

Principal Components Analysis for Risk Aversion Scale

Scale	Scale Item	Factor Loading	Reliability
Risk Aversion			.7497
	Taking risks can be fun	.7503	
	I would like to drive a race car	.7119	
	I sometimes do things I know are dangerous just for fun	.8377	
	I have considered sky diving as a hobby	.7189	
	I prefer friends that are unpredictable	.6380	

TABLE 3.6

Principal Components Analysis for Product Experience Scale

Scale	Scale Item	Factor Loading	Reliability
Product Experience			.8620
	I have experience using the product in the case	.8191	
	I consider myself pretty handy around the house	.8376	
	I use the product in the case frequently	.8868	
	I have a great deal of skill in using the product in the case	.8981	

Empathy

The empathy scale was developed and tested extensively by Batson and his colleagues (Coke, Batson, and McDavis 1978; Batson, Duncan, Ackerman, Buckley, and Birch 1981; Batson and Coke 1981; Batson, O'Quin, Fultz, and Vanderplas 1983). The scale has been shown to be a reliable and valid indicator of "an altruistic desire to reduce the distress of the person in need" (Batson, O'Quin, Fultz, and Vanderplas 1983, p. 706).

The empathy scale appears twice in the survey instrument. The first time is to assess empathy as an individual difference variable. In this case, the scale is tapping a general personality trait of the respondent. No source or target for the desire to help is presented. The second time, the scale is used as a measure of affect brought about by the experimental scenario and directed toward specific targets. The use of the scale in this capacity is described more fully under the heading Distress and Empathy below. The results of the pretest for the empathy scale as a general personality trait is presented in Table 3.7.

Business Attitude

Business attitudes are measured by four items devised for this study. This scale is intended to capture the respondent's attitude regarding the business community and its social responsibility. After reviewing social responsibility measurement scales (in particular, Berkowitz and Lutterman 1968), four items were constructed which have been revised through pretesting to achieve a parsimonious, yet still

TABLE 3.7

Principal Components Analysis for Empathy Scale

Scale	Scale Item	Factor Loading	Reliability
Sympathy			.8903
	I feel compassion for people in need	.8274	
	I feel sympathy for people less fortunate than I	.7880	
	I have a warm feeling for my fellow man	.8290	
	I am softhearted regarding the welfare of others	.8732	
	I would describe myself as a "tender" person	.8326	
	I feel moved when I hear of the plight of others	.8269	

TABLE 3.8

Principal Components Analysis for Attitude Toward Business Scale

Scale	Scale Item	Factor Loading	Reliability
Business Attitude			.7243
	Businesses are concerned about the welfare of society	.8019	
	Consumer welfare is the driving force behind business today	.8048	
	Big business is strictly interested in profit	.6782	
	Most businesses today have the consumer's welfare in mind	.7170	

reliable, scale. Results of the second pretest of the revised items are presented in Table 3.8.

Distribution of Wealth

Measures for the distribution of wealth construct were adopted from the "welfarism" dimension of Comrey and Newmeyer's (1965) radicalism-conservatism scale. This scale has been tested across a variety of situations and samples, and reported as highly reliable. From a legal perspective, the scale can be considered an assessment of the respondent's attitude toward the legal theory of "risk spreading." The reduced form included in the survey instrument was found to display an acceptable level of reliability (see Table 3.9).

Jealousy

For the purposes of this study, jealousy is conceived as a general personality trait of the respondent. The scale to assess jealousy is comprised of four items developed by the author and revised during pretesting. After purification, the scale items load on a single factor and are internally consistent (see Table 3.10).

Personal values

The respondent's personal values are measured using Rokeach's values inventory (Rokeach 1973). In the survey instrument, the eighteen terminal values are presented as five-point Likert statements to be evaluated independently by the respondent. In pretesting, a three factor solution was found to explain much of the original variance. The results of previous studies (Mason, Durand, and Taylor 1979; Gutman and Vinson 1979; Darden, DeConinck, Babin, and Griffin 1991) support the

TABLE 3.9

Principal Components Analysis for Wealth Distribution Scale

Scale	Scale Item	Factor Loading	Reliability
Wealth Sharing			.7112
	Social welfare programs should be our government's top priority	.7579	
	The government should assure at least a basic standard of living for everyone	.7440	
	Poverty should be done away with by making basic changes in our social system	.7650	
	The enormous wealth of the very rich should be distributed among all people	.6276	

TABLE 3.10

Principal Components Analysis for Jealousy Scale

Scale	Scale Item	Factor Loading	Reliability
Jealousy			.7249
	I have to admit that I am sometimes jealous of other people's possessions	.7908	
	I am resentful when others are treated better than I am	.7310	
	Sometimes it seems like other people get all the lucky breaks	.7582	
	I am envious when I hear of someone winning a lot of money in the lottery	.7254	

factor structure reported here. Each of the dimensions exhibit an acceptable level of internal consistency (see Table 3.11).

Age, Gender and Income

Age, gender, and income, as well as several other demographic variables, are include in the survey instrument. Each of the demographic variables, with the exception of age, were measured by asking the respondent to check the appropriate category. Age is assessed by an open-ended question asking the respondent to enter their actual age.

Unanticipated Consequences

Unanticipated consequences is designed to measure the respondent's judgement of the plaintiff's expectations regarding product safety. In other words, does the respondent think the user of the product recognized or should have anticipated the danger associated with its use? The author composed five items to capture the unanticipated consequences. After scale analysis and modification of the original items, three were retained that both load highly on a single factor and display acceptable internal consistency, providing a parsimonious yet reliable scale. The revised items, their factor loadings, and the reliability coefficient (Cronbach 1951) appear in Table 3.12.

Assignment of Blame/Responsibility

In measuring the assignment of blame/responsibility, two issues must be addressed. First, the appropriate bases for the causal attributions must be identified. That is, *who* or *what* is the accident

TABLE 3.11

Factor Analysis of Rokeach Terminal Values

Scale / Scale Item	Factor Loading 1	2	3	Reliability
Idealistic				.8770
A sense of accomplishment	.8131	.2377	.1213	
A world at peace	.7611	.0453	.0451	
A world of beauty	.7436	.2438	.2111	
Equality	.6528	.1863	.1089	
Inner harmony	.7509	.1679	.0678	
Mature love	.8346	.0599	.0589	
Salvation	.5296	.1479	.2406	
True friendship	.6743	.0925	.2185	
Wisdom	.6119	.1065	.2764	
National security	.5296	.3406	.1479	
Security				.7814
Family security	.2106	.7131	.1199	
Freedom	.2444	.6934	.0632	
Happiness	.0075	.5923	.2712	
Self-respect	.0894	.5566	.0949	
Romantic				.7471
A comfortable life	.0242	.3946	.6697	
An exciting life	.0282	.0436	.7475	
Pleasure	.1262	.2603	.7969	
Social recognition	.1766	.1020	.7574	

TABLE 3.12

Principal Components Analysis for Unanticipated Consequences Measures

Scale / Scale Item	Factor Loading	Reliability
Unanticipated Consequences Scale		.7609
The plaintiff recognized the danger of using the product	.7834	
The plaintiff knew that the injury might occur	.8172	
The plaintiff should have known the product was dangerous	.7564	

attributed to? Second, what is the suitable term(s) to use to capture *causality*?

In regard to the first question, Kelley's (1967, p. 194) principle of covariance (Kelley Cube) established three dimensions of causal inferences: (1) the stimulus object or *entities;* (2) the observer of the event or *person;* and (3) the context or *time* in which the effect occurs. In a widely cited study of causal attribution, McArthur (1972, p. 175) operationalized these dimensions by asking respondents to assign the cause of an event to either (1) "something about *the person*," (2) "something about *Stimulus X*," (3) "something about the *particular circumstances*," or (4) a combination of these factors. Bettman (1979) has suggested that when applied to the study of consumer behavior, the corresponding causal agents would be (1) the consumer, (2) the product, and (3) the situation. Folkes (1984) successfully utilized this categorization in her study of causal attributions of product failure. It is important to note, however, that Folkes (1984, p. 75) broadened the "product" category to include not only the actual product (pants), but the members of the marketing channel (the manufacturer of the pants and the retailer who sold them) as well. Based on these studies, the consumer, the product/manufacturer, and the situation were determined to be the appropriate bases of causal attribution for this study.

The second question arises from the conceptual work of Shaver (1985), who argues persuasively that attributions of *blame* and *responsibility* are not identical and the different dimensions might relate more to one attribution than to another. Based on Shaver's supposition, pretests have been conducted using attributions of both

TABLE 3.13

Correlation Between Measures of Blame and Responsibility

	Blame Consumer	Blame Product	Blame Situation
Responsibility Consumer	.8292	-.7189	.0013
Responsibility Product	-.6876	.8538	-.1129
Responsibility Situation	-.0229	-.0772	.7166

TABLE 3.14

Factor Analysis for

Assignment of Blame/Responsibility Measures

Scale Scale Item	Factor Loading 1	 2	Reliability
Assignment to the Plaintiff/Defendant			.9211
How RESPONSIBLE was the PLAINTIFF	.9077	-.1278	
How much do you BLAME the PLAINTIFF	.8734	-.1472	
How RESPONSIBLE was the MANUFACTURER	-.9151	-.0347	
How much do you BLAME the MANUFACTURE	-.9000	-.0097	
Assignment to the Situation			.8374
How RESPONSIBLE was FATE or CIRCUMSTANCES	.1056	.9190	
How much do you BLAME FATE or CIRCUMSTANCES	.1163	.9191	

blame and responsibility toward the person, product, and situation (see Appendix C, p. 287, items 21-23; p. 289, items 1-3). The results reveal a high correlation between measures of blame and responsibility for each of the three bases of attribution (see Table 3.13). A similar finding has recently been reported by McCaul, Veltum, Boyechko, and Crawford (1990) who employed measures of attributions of both *blame* and *responsibility* in a study of rape victims. Their results (McCaul, et al. 1990, p. 13) also indicated a high correlation between the two measures (average correlation = .62), which they consequently summed for further analysis. Therefore, despite Shaver's arguments, empirical evidence suggests that respondents have a difficult time distinguishing between the concepts of *blame* and *responsibility*.

Furthermore, factor analysis of the six items indicates that a two factor solution is appropriate. As can be seen in Table 3.14, the four items measuring attributions to the consumer and manufacturer loaded on a single factor (but with opposite loadings) and exhibit a high degree of internal consistency (Cronbach alpha = .92). At the same time, the responsibility and blame items for the situation loaded on a separate factor. Thus, scales using both terms are included in the survey instrument to provide a multi-item measure, but will be reverse coded when need be and summed to create measures of blame/responsibility toward (1) the manufacturer and (2) the situation.

Distress and Empathy

Distress and empathy, toward both the plaintiff and manufacturer, are included as measures of affect that mediate the assignment of

blame/responsibility and the jury award. Batson, O'Quin, Fultz, Vanderplas, and Isen (1983, p. 706) have developed scales to measure "two different emotional responses to seeing another person suffer." According to Batson et al. (1983, p. 706) "Personal distress produces an egoistic desire to reduce one's own distress; empathy, an altruistic desire to reduce the distress of the person in need." Both scales have been extensively tested and refined (Coke, Batson, and McDavis 1978; Batson, Duncan, Ackerman, Buckley, and Birch 1981; Batson and Coke 1981) to insure their reliability and to establish their construct validity.

One of these measures, empathy toward the plaintiff, has been previously employed in a marketing study investigating consumer-juror reaction to product liability legal protocols (Darden et al. 1991).[2] Pretesting for this study revealed the scales performed in almost identical fashion for both the plaintiff (see Table 3.15) and manufacturer (see Table 3.16). In all three studies, (compare Batson et al. 1983, p. 717; Darden et al. 1991, p. 77; and Tables 3.15 and 3.16), both empathy and personal distress display high internal consistency. Both of these scales are included in the survey instrument to assess feelings toward the consumer and manufacturer.

Jury Award

When compared to traditional consumer behavior studies, jury award can be considered much like consumer purchase intentions. That is, jury award is intended to capture the respondent's overall assessment of the

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[2]Although using the same scale items as Batson, O'Quin, Fultz, Vanderplas, and Isen, Darden et al. refer to the scale as "sympathy."

TABLE 3.15

Measures of Affect Toward Plaintiff

Scale / Item	Factor Loading 1	Factor Loading 2	Reliability
Distress			.8822
Alarmed	.6877	.2387	
Grieved	.7819	.2730	
Upset	.7705	.2335	
Worried	.7015	.1725	
Disturbed	.8045	.2339	
Perturbed	.6692	.1310	
Distressed	.7845	.2994	
Empathy			.9170
Troubled	.2388	.6801	
Sympathetic	.1730	.7569	
Moved	.2340	.7462	
Compassionate	.1976	.8317	
Tender	.2368	.8200	
Warm	.2144	.7772	
Softhearted	.2031	.7981	

TABLE 3.16

Measures of Affect Toward Defendant

Scale / Item	Factor Loading 1	Factor Loading 2	Reliability
Distress			.9288
Alarmed	.7875	.1221	
Grieved	.6855	.2399	
Upset	.8481	.0609	
Worried	.7724	.2537	
Disturbed	.8928	.0053	
Perturbed	.8751	.0317	
Distressed	.7943	.2687	
Empathy			.9015
Troubled	.2041	.7725	
Sympathetic	.0330	.7544	
Moved	.3027	.7635	
Compassionate	.0827	.7374	
Tender	.2066	.8882	
Warm	.1357	.9162	
Softhearted	.0812	.8638	

incident. In pretesting, two approaches have been used to measure jury award. The first, developed by Darden et al. (1991), asks the respondent to independently rate the likelihood of selecting each of four verdicts on a five-point scale ranging from "Most Unlikely" to "Most Likely." The verdicts were identified in focus group discussions with product liability attorneys as the expected verdicts in liability cases. Darden et al. (1991, p. 77) report the "verdict" scale is both unidimensional and internally consistent (Cronbach alpha = .84). In pretesting, very similar characteristics have been found (see Table 3.17).

The second approach was developed through pretesting. This measure is a seven-point "award" scale providing actual dollar amounts for the respondent to choose from (see Appendix C, p. 287, item 28). Subjects are provided a reference point by incorporating a specific figure ($250,000) that the plaintiff has requested in his lawsuit. This figure was used as the midpoint in a balanced scale anchored by "$0" and "Maximum amount allowable." Analysis of the pretest data revealed a strong correlation between the award scale and the verdict scale items (see Table 3.18). The magnitude and direction of each correlation indicates high consistency between the measures. Both approaches are included in the survey instrument.

Summary

The preceding section discussed the procedure for developing the measures to be used in the survey instrument and reported the results of the second pretest. Much effort was spent to develop measurement

TABLE 3.17

Principal Components Analysis of Verdict Scale

Scale	Scale Item	Factor Loading	Reliability
Verdict			.8550
	ACQUITTAL (not guilty) of the manufacturer	-.8749	
	Full MEDICAL SUPPORT for the injured party	.7168	
	Full MEDICAL SUPPORT and PAIN and SUFFERING for the injured party	.8466	
	Full MEDICAL SUPPORT, PAIN and SUFFERING and PUNITIVE DAMAGES for the injured party	.7128	

TABLE 3.18

Correlation Between Award Scale and Verdict Scale

	Award Item 1	Award Item 2	Award Item 3	Award Item 4	Verdict Amount
Award Item 1	1.000	-.630	-.644	-.700	-.670
Award Item 2	-.630	1.000	.627	.520	.582
Award Item 3	-.644	.627	1.000	.781	.700
Award Item 4	-.700	.520	.781	1.000	.724
Verdict Amount	-.670	.582	.700	.724	1.000

devices insuring the validity of the results of the study. Based on the analysis of the second pretest, the revised scales all appear to be reliable and possess content validity. The following section presents the process for using the survey instrument to gather the data to test the research hypotheses.

Sampling Frame and Data Collection Procedure

The following section discusses the population, the sample, sample size, and the procedure utilized for collecting the data to test the research hypotheses.

Population

Everyone is affected by product liability lawsuits. Certainly the opinions and viewpoints of the consumer who sustained the injury; employees of the firms producing, distributing, and selling the product; and those involved in the judicial process all are important. However, the attitudes of the typical consumer are equally relevant. Even if an individual is never directly involved in a product-related mishap, s/he is exposed to product liability incidents through media sources.

The impact of this negative publicity can be devastating. Consider the recent experience of Audi, who was charged with "unintended acceleration" of their 5000 series automobile. Although Audi never lost an actual liability case regarding unintended acceleration, the negative publicity arising from the charges forced the firm to discontinue production of the model and substantially weakened the company's reputation in the U.S. market (see "A Gripping Way to Tout Safety" 1991). The point is, every consumer exposed to the incident passes

judgement regarding product liability suits, whether or not they are empaneled as jurors. Thus the views of all consumers are important to this research.

The population from which the sample for this study is drawn consists of all adults over the age of eighteen in the Lexington, Kentucky metropolitan area. The demographic characteristics of Lexington residents are representative of the United States as a whole based on age distribution, male-female ratio, and ethnic origin, and slightly above average on education and income.

Sample

The sample design attempted to sample across demographic and other personal characteristics to maximize variance on the individual difference constructs. Constraints were not be placed on the sample, with the exception of excluding full-time students. A sample of 384 respondents in a balanced experimental design (minimum cell size equals 12) was judged sufficient for the statistical analysis required to test the research hypotheses.

Data Collection Procedure

The data collection procedure used in this research follows the approach suggested by Abramson and Mosher (1975) and utilized in a psycholegal study by Feild (1978). Abramson, Goldberg, Mosher, Abramson, and Gottesdiener (1975) point out that traits of the researcher (i.e., sex, status, and style of interacting) can have a significant effect on the subject's response to some issues. Therefore, Abramson and Mosher (1975) suggest using multiple interviewers with

varied demographic and personality traits in the data collection process. Feild (1978, p. 160) applied this procedure in a psycholegal study of attitudes toward rape. In Feild's experiment, students were familiarized with the survey instrument and trained in the administration of the measures. The students were then used as field interviewers to administer the questionnaire.

The same procedure was used for this study. Students enrolled in marketing research classes were thoroughly familiarized with the survey instrument, and received training in administering the questionnaire. The students then personally distributed the survey instrument to members of the specified population. Each student collected data from a maximum of four respondents. In total, 117 interviewers distributed 468 research questionnaires (see Appendix D). A total of 421 questionnaires were returned, four of which were rejected due to a question about their authenticity and six due to substantial missing data. Thus 411 responses were judged suitable for inclusion in the present study (usable response rate of 87.8%).

Research Sample

To balance the experimental cells, twelve questionnaires were randomly selected to represent each experimental scenario, for a total research sample of 384. The distribution of this sample closely matches that of the population across several demographic characteristics. As can be seen in Table 3.19, the respondents' gender and ethnic origin are nearly identical to the population. The research sample is slightly younger, better educated, and posses higher annual income than the

TABLE 3.19

Comparison of Sample Demographic Characteristics with Population Demographic Characteristics[1]

Demographic Variable Categories	Sample Distribution	Population Distribution
Gender		
Male	48.8%	48.2%
Female	51.2%	51.8%
Ethnic Origin		
White	88.2%	85.7%
Black	10.3%	13.2%
Hispanic	0.5%	0.6%
Oriental	0.5%	0.8%
American Indian	0.5%	0.1%
Age		
18 - 24	39.3%	27.5%
25 - 34	29.9%	25.0%
35 - 44	11.2%	15.3%
45 - 54	13.0%	11.0%
55 - 64	4.7%	10.0%
65 - 74	1.5%	6.7%
75 and above	0.4%	4.5%
Level of Education		
Less than 12 years	0.5%	2.8%
12 years to 16 years	40.2%	71.6%
Over 16 years	59.3%	25.6%
Annual Income		
Less than $10,000	21.8%	30.6%
$10,000 - $19,999	20.7%	31.0%
$20,000 - $29,000	21.8%	19.6%
$30,000 - $39,000	13.9%	10.5%
$40,000 - $49,000	10.9%	4.1%
$50,000 and above	10.9%	4.2%

[1] Population statistics are from the U.S. Bureau of the Census, County and City Data Book, 1983, Washington, D.C.: U.S. Government Printing Office.

population. This can partially be attributed to the fact that the education and income figures obtained from the census information are over ten years old (1979) and that interviewers were discouraged from obtaining data from students currently enrolled in college. Thus the research sample was judged to a fair representation of the population.

Summary

The population specified for this study consists of all adults over the age of eighteen in the Lexington, Kentucky metropolitan area. The sample was obtained by a procedure previously utilized in psycholegal research. This procedure provides several benefits. First, interviewers of both sexes, a mixture of ethnic backgrounds, and varied styles of interaction were utilized to administer the survey instrument, thus avoiding the pitfall pointed out by Abramson et al. (1975). Second, the wide variance in characteristics of the interviewers is reflected in the respondents. Third, interviewers were able to clarify any questions the respondents might have while completing the questionnaire. Finally, the non-response bias often associated with marketing research surveys are avoided. The usable response rate for the current study was 87.8%. Overall, the research sample appears well suited for the purposes of this study.

Summary

Chapter Three presented the research methodology necessary to test the hypotheses developed and proposed in Chapter Two. This chapter first described the procedure undertaken to operationalize the experimental factors and construct the legal protocols. Second, the

source and/or development of the measures for the research constructs was presented, including measures of reliability conducted during pretesting. Next the population, sample size, and procedure used to collect the data was discussed. Finally, the research sample was discussed and compared with the populations on several demographic characteristics.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

Introduction

The preceding chapters have introduced the research topic, reviewed the relevant literature, delineated the research hypotheses and the methodology necessary to test those hypotheses, and described the sample utilized in the study. Chapter Four presents the results from the statistical analysis employed to test the research hypotheses. This Chapter focuses on a strict interpretation of the results; discussion and implications of these results is primarily reserved for Chapter Five. Results of the hypotheses tests are organized around each of the eight dependent measures (unanticipated consequences, assignment of responsibility to the situation and manufacturer, the four affective reactions, and jury award). Following the presentation of all results, a summary of the research findings is presented.

H1a - H1f: Predictors of Unanticipated Consequences

The first dependent measure in the research model is the construct termed *unanticipated consequences* (UC). Based on related theoretical research, we hypothesize that UC is predicted by personal variables of the respondent, in particular experience with the product (H1a) and risk aversion (H1b), along with manufacturer/retailer factors. In this study the manufacturer/retailer variables are operationalized as experimental factors for warning labels (H1c), level of service (H1d), safety in advertisements (H1e), and inherent danger of the product (H1f). Thus six specific hypotheses are tested regarding unanticipated consequences.

The hypotheses predicting UC are tested by analysis of covariance. The results of this analysis are presented in Table 4.1a. Both the covariates ($F = 7.202$) and main effects ($F = 14.836$) are significant at the .001 level. Discussion of each specific hypotheses follows.

Table 4.1a

Analysis of Variance for Unanticipated Consequences

Hypothesis	Source of Variation	Sum of Squares	DF	Mean Square	F	Level of Significance
	Covariates	136.873	2	68.437	7.202	.001
H1a	Product Experience	40.104	1	40.104	4.220	.041
H1b	Risk Aversion	58.380	1	58.380	6.144	.014
	Main Effects	563.888	4	140.972	14.836	.000
H1c	Warning Labels	100.223	1	100.223	10.547	.001
H1d	Level of Service	3.980	1	3.980	.419	.518
H1e	Safety in Advertising	91.885	1	91.885	9.670	.002
H1f	Inherent Danger	366.781	1	366.781	38.599	.000
	Explained	700.761	6	116.794	12.291	.000
	Residual	3487.324	367	9.502		
	Total	4188.086	373	11.228		

384 Cases were processed; 10 Cases (2.6 %) were missing.

Table 4.1b

Regression Analysis Predicting Unanticipated Consequences

Hypothesis	Predictor Variable	B	Partial Correlation	T Value	Level of Significance
H1a	Product Experience	-.08633	-.11610	-2.025	.0438
H1b	Risk Aversion	-.12560	-.16010	-2.809	.0053
H1c	Safety Warnings	-.92973	-.14878	-2.606	.0096
H1d	Level of Service	-.34679	-.05556	-0.964	.3359
H1e	Safety in Advertising	1.15260	.18365	3.236	.0013
H1f	Inherent Danger	-1.98853	-.30601	-5.567	.0000
	Constant	22.41998		17.071	.0000

			Analysis of Variance		
Multiple R	.42234		DF	Sum of Squares	Mean Square
R^2	.17837				
Adjusted R^2	.16193	Regression	6	632.54448	105.42408
Standard Error	3.11649	Residual	300	2913.75520	9.71252

F = 10.85445 Significance F = .0000

H1a: A negative relationship exists between respondent experience with the product and unanticipated consequences.

It is hypothesized that greater experience with the product makes the respondent more aware of the potential consequences of product use. Results of the analysis provide support for this supposition. Table 4.1a has data that support a negative relationship between product experience and UC ($F = 4.220$; $p < .041$). It seems rational that those consumers with greater experience with the product know more about what it can and cannot do. Thus there are fewer unanticipated consequences of use.

H1b: A negative relationship exists between respondent risk aversion and unanticipated consequences.

H1b proposes that as respondent aversion to risk increases, unanticipated consequences tends to diminish. The results support this hypothesis ($F = 6.144$; $p < .014$). Thus the data indicate a risk averse person is more likely to anticipate the danger of product usage.

H1c: A negative relationship exists between the prominence of safety warnings and unanticipated consequences.

More obvious safety warnings are hypothesized to reduce the level of unanticipated consequences. In other words, safety warnings are expected to make the consumer more aware of the negative consequences of using the product. The research data and analysis presented in Table 4.1a support this hypothesis ($F = 10.547$; $p < .001$). This suggests that firms who employ safety warnings reduce the level of unanticipated consequences and lower liability risks.

H1d: A negative relationship exists between the level of service provided and unanticipated consequences.

As the level of service increases, the user is expected to become more aware of the danger of using the product. This is the only hypothesis concerning UC not supported by the results presented in Table

4.1a. Essentially, no relationship exists between the level of service and unanticipated consequences ($F = .419$; $p < .518$). Thus H1d should be rejected, as we have no evidence that level of retail service is related to unanticipated consequences.

H1e: A positive relationship exists between the prominence of product safety in advertising and unanticipated consequences.

Advertisements depicting the product as safe are hypothesized to increase UC. That is, if an individual is exposed to advertising claims which portray the product as harmless, negative consequences from product usage are less likely to be anticipated. This hypothesis is supported by the research data ($F = 9.670$; $p < .002$). Thus this study confirms that business communications can result in consumer attitudes that are potentially harmful to the firm.

H1f: A negative relationship exists between the inherent danger of the product and unanticipated consequences.

The potential negative consequences arising from the use of inherently dangerous products should be more obvious than those of products considered less dangerous. As can be seen in Table 4.1a, H1f receives strong support ($F = 38.599$; $p < .001$). Therefore this study provides empirical evidence indicating that consumers are better able to anticipate the negative consequences of using inherently dangerous products than those generally considered safe.

Summary. Five of the six variables hypothesized to predict unanticipated consequences are determined to be significant. Only the level of retailer service, hypothesized to be negatively related to unanticipated consequences, is an insignificant predictor of UC. Comparison of the explained variance to the total indicates about 17% of the variance in unanticipated consequences can be explained by the six hypothesized predictor variables.

By using indicator variables for the experimental factors, we are also able to test this series of hypotheses with multiple regression analysis. This technique is utilized to allow a more direct comparison between the results of the tests for Hypotheses One and the remaining research hypotheses. The results of multiple regression analysis are reported in Table 4.1b. With slight differences due to the handling of missing data, the results of multiple regression analysis are virtually identical to that of analysis of covariance (compare Tables 4.1a and 4.1b).

The regression model indicates that the hypothesized predictors explained approximately 18% of the variance in unanticipated consequences. Consistent with analysis of covariance, regression analysis shows support for five of the six hypotheses, with only level of service found to be non-significant. Comparing the partial correlation coefficients indicates that inherent danger of the product has a noticeably larger effect (partial correlation = .30601) than any of the other predictors of UC. The partial correlations of the remaining significant predictors, product experience, risk aversion, product safety warnings, and safety in advertising, are all in a relatively narrow band ranging from .11610 to .18365.

H2a - H2j: Predictors of Assignment of Responsibility to Manufacturer

The second dependent measure in the research model is the assignment of responsibility for the accident to the manufacturer (ARM). Predominantly derived from attribution theory, ten predictors of ARM are hypothesized and tested by analysis of covariance. The five experimental factors are treated as main effects (H2a - H2e), while five individual difference characteristics (H2f - H2j) are included in the analysis as covariates.

Table 4.2a

Analysis of Variance for Assignment of Responsibility to Manufacturer

Hypothesis	Source of Variation	Sum of Squares	DF	Mean Square	F	Level of Significance
	Covariates	6168.302	5	1233.660	58.363	.000
H2f	Product Experience	49.455	1	49.455	2.340	.127
H2g	Conservative	65.975	1	65.975	3.121	.078
H2h	Business Attitude	59.019	1	59.019	2.792	.096
H2i	Jealousy	290.948	1	290.948	13.764	.000
H2j	UC	5654.734	1	5654.734	267.519	.000
	Main Effects	1087.148	5	217.430	10.286	.000
H2a	Level of Service	0.127	1	0.127	0.006	.938
H2b	Safety Regulations	117.781	1	117.781	5.572	.019
H2c	Safety Warnings	514.172	1	514.172	24.325	.000
H2d	Safety in Advertising	22.260	1	22.260	1.053	.305
H2e	Inherent Danger	512.992	1	512.992	24.269	.000
	Explained	7255.451	10	725.545	34.325	.000
	Residual	7503.893	355	21.138		
	Total	14759.344	365	40.437		

384 Cases were processed; 18 Cases (4.7 %) were missing.

Table 4.2b

Regression Analysis Predicting Assignment of Responsibility to Manufacturer

Hypothesis	Predictor Variable	B	Partial Correlation	T Value	Level of Significance
H2a	Level of Service	.21570	.02350	0.404	.6862
H2b	Safety Regulations	-1.29592	-.13981	-2.429	.0157
H2c	Safety Warnings	-1.98155	-.21116	-3.717	.0002
H2d	Safety in Advertising	.96817	.10423	1.803	.0724
H2e	Inherent Danger	-2.56606	-.25677	-4.571	.0000
H2f	Product Experience	.08167	.07742	1.336	.1826
H2g	Conservative Philosophy	-.32099	-.14218	-2.471	.0140
H2h	Business Attitude	-.50032	-.10702	-1.852	.0650
H2i	Jealousy	.23719	.16240	2.832	.0049
H2j	UC	.98793	.56075	11.652	.0000
	Constant	2.58383		1.519	.1297

			Analysis of Variance		
Multiple R	.71117		DF	Sum of Squares	Mean Square
R^2	.50577	Regression	10	6380.76936	638.07694
Adjusted R^2	.48907	Residual	296	6235.29579	21.06519
Standard Error	4.58968				

F = 30.29059 Significance F = .0000

The results of the analysis of covariance testing hypotheses H2a - H2j are presented in Table 4.2a. Both the covariates ($F = 58.363$; $p < .001$) and main effects ($F = 10.286$; $p < .001$) are found to be significant. Each of the ten hypotheses regarding assignment of responsibility to the manufacturer are discussed individually below.

H2a: A positive relationship exists between the level of service provided and assignment of responsibility to the manufacturer.

Based on attribution theory's *discounter principle*, an individual tends to discount a potential cause when an alternative cause is present. Since a higher level of service would tend to reduce other potential causes, it is hypothesized that a higher level of service would result in greater assignment of blame to the manufacturer. Analysis of the research data, however, reveals no relationship between level of service and ARM ($F = 0.006$; $p < .938$). Therefore, hypotheses H2a should be rejected.

H2b: A negative relationship exists between willingness to exceed safety regulations and assignment of responsibility to the manufacturer.

Although the conduct of the manufacturer is not relevant under the legal policy of strict liability, we feel that information regarding the manufacturer's willingness to exceed safety regulations would affect respondent's evaluation of the accident. Exceeding safety regulations should result in a product safer than that required by law. Thus it is hypothesized that exceeding safety regulations, and offering a safer product, reduces ARM. Results of the data analysis support H2b ($F = 5.572$; $p < .019$), leading us to conclude that exceeding safety regulations reduces the manufacturer's blame for product-related injuries. Thus exceeding safety regulations may result in fewer product liability actions against the manufacturer.

H2c: A negative relationship exists between the prominence of safety warnings and assignment of responsibility to the manufacturer.

More obvious safety warnings serve to make the consumer aware of the danger of using the product. We hypothesize that by providing these warnings, the manufacturer reduces the likelihood of being blamed for a product-related injury. The research data support this assumption ($F = 24.325$; $p < .001$). Thus we conclude that more prominent safety warnings reduce the assignment of responsibility to the manufacturer.

H2d: A positive relationship exists between the prominence of product safety in advertising and assignment of responsibility to the manufacturer.

We propose that advertisements stressing safety will heighten consumer expectations of product safety. Based on the disconfirmation paradigm, we hypothesize that any accident occurring with these increased expectations will result in attributions of blame to the manufacturer. However, the results reported in Table 4.2a ($F = 1.053$; $p < .305$) fail to support this hypothesis.

H2e: A negative relationship exists between the inherent danger of the product and assignment of responsibility to the manufacturer.

We hypothesize that product-related injuries are less likely to be attributed to the manufacturer when they result from the use of an inherently dangerous product than a product generally considered safe. In other words, when consumers use dangerous products, they assume some of the risk of injury. The research data provide strong support for this hypothesis ($F = 24.269$; $p < .001$). Therefore, we conclude that consumer use of dangerous products reduces manufacturer blame for product injuries.

H2f: A negative relationship exists between respondent experience with the product and assignment of responsibility to the manufacturer.

Earlier studies by Shaver (1970) and Burger (1981), have shown "people who are in a position themselves to be victims blame a victim for suffering a mishap" (Folkes and Kotsos 1986, p. 75). These *defensive attributions* lead us to hypothesize that respondents who use

the product themselves are less likely to assign blame to the manufacturer. Research data fail to support this hypothesis ($F = 2.340$; $p < .127$).

H2g: A negative relationship exists between respondent conservative philosophy and assignment of responsibility to the manufacturer.

Previous attribution theory research (Regan, Straus, and Fazio 1974; Bell, Wicklund, Manko, and Larkin 1976) indicates that positive actions of a liked entity, and negative actions of a disliked one, are attributed to personal factors of those entities. Furthermore, *self-labelling effects* assume that an individual will act in a manner consistent with how they label themselves. We propose that respondents labeling themselves as "conservative" will act in that fashion, assigning less blame to the manufacturer. H2g receives marginal support from the research data ($F = 3.121$; $p < .078$).

H2h: A negative relationship exists between respondent attitude toward business and assignment of responsibility to the manufacturer.

Similar to H2g, a respondent depicting themselves as pro-business are expected to act favorably toward the manufacturer. Therefore, we hypothesize a negative relationship between business attitude and ARM. Analysis of the research data reveals marginal support for this hypothesis ($F = 2.292$; $p < .096$) as well.

H2i: A positive relationship exists between respondent jealousy and assignment of responsibility to the manufacturer.

We propose that respondents displaying jealousy as a personality trait will assign greater blame to the manufacturer. More specifically, we hypothesize that respondents jealous of the manufacturer's financial position and seeing themselves as less fortunate, will identify with the victim of the accident and assign blame for the accident to the manufacturer. Analysis of the research data supports H2i ($F = 13.764$;

$p < .001$). Thus jealous respondents tend to assign greater blame for product-related injuries to the manufacturer.

H2j: A positive relationship exists between unanticipated consequences and assignment of responsibility to the manufacturer.

Attribution research (Weiner 1982, 1985b) indicates that unexpected events tend to elicit spontaneous causal attributions. In addition, the *Just World Hypothesis* (Lerner and Miller 1978) posits that the world is orderly, with any unusual event requiring a causal role by either the victim or perpetrator. We hypothesize that unanticipated consequences will lead to greater assignment of responsibility to the manufacturer. Results of the analysis of covariance clearly support this hypothesis ($F = 267.734$; $p < .001$). Thus the research data provide strong evidence that unanticipated product-related injuries are blamed on the manufacturer.

Summary. Overall, analysis of covariance reveals seven of the ten hypotheses regarding assignment of responsibility to the manufacturer are at least marginally significant ($p < .10$). Three of the hypothesized main effects, safety regulations (H2b), safety warnings (H2c), and inherent product danger (H2e), are shown to be significant predictors of ARM. Level of service (H2a) and safety in advertising (H2d) are not significantly related to ARM. Four of the five individual difference characteristics hypothesized as covariates are significant (conservative philosophy (H2g), attitude toward business (H2h), jealousy (H2i), and unanticipated consequences (H2j)). Only product experience (H2f) is not significantly related to ARM. Slightly less than one-half of the variance (49%) in assignment of responsibility to the manufacturer is explained by the variables tested by analysis of covariance.

As with Hypothesis One, using indicator variables for the experimental factors allows us to test this series of hypotheses with

multiple regression analysis. The results of this analysis reveal one notable deviation from the analysis of covariance (compare Tables 4.2a and 4.2b). Specifically, H2d hypothesizing a positive relationship between safety in advertising and ARM is marginally significant ($T = 1.803$; $p < .0724$) in the regression analysis, but insignificant in the analysis of covariance ($F = 1.053$; $p < .305$).

Multiple regression analysis also indicates that the hypothesized predictor variables explain about one-half of the variance in ARM ($R^2 = .50577$). Comparison of the partial correlation coefficients reveals that unanticipated consequences is by far the most important predictor of assignment to the manufacturer (partial correlation = .56075). Also very influential predictors are inherent danger (.25677) and safety warnings (.21116). The partial correlations of the remaining significant predictors are roughly comparable, ranging from .10423 to .16240.

H3a - H3g: Predictors of Assignment of Responsibility to Situation

A second basis of responsibility, assignment of responsibility to the situation (ARS), is the third dependent measure in the research model. Based largely on the same theoretical foundation as assignment to manufacturer, seven predictors of ARS are hypothesized and tested by analysis of covariance. Three of the experimental factors, safety regulations (H3a), warning labels (H3b), and inherent danger (H3c), are hypothesized as predictors of ARS and treated as main effects. Four covariates, product experience (H3d), locus of control (H3e), risk aversion (H3f), and unanticipated consequences (H3g), are also included in the analysis of covariance.

The results of the ANCOVA testing hypotheses H3a - H3g are presented in Table 4.3a. While the covariates display a high level of significance ($F = 5.416$; $p < .001$), the main effects are only marginally significant ($F = 2.263$; $p < .081$). The following section discusses the

Table 4.3a

Analysis of Variance for Assignment of Responsibility to Situation

Hypothesis	Source of Variation	Sum of Squares	DF	Mean Square	F	Level of Significance
	Covariates	210.402	4	52.600	5.416	.000
H3d	Product Experience	3.612	1	3.612	.372	.542
H3e	Locus of Control	115.073	1	115.073	11.847	.001
H3f	Risk Aversion	6.952	1	6.952	.716	.398
H3g	Unanticipated Consequences	94.729	1	94.729	9.753	.002
	Main Effects	65.940	3	21.980	2.263	.081
H3a	Safety Regulations	20.469	1	20.469	2.107	.147
H3b	Warning Labels	13.366	1	13.366	1.376	.242
H3c	Inherent Danger	33.073	1	33.073	3.405	.066
	Explained	276.341	7	39.477	4.064	.000
	Residual	3418.947	352	9.713		
	Total	3695.289	359	10.293		

384 Cases were processed; 24 Cases (6.3 %) were missing.

Table 4.3b

Regression Analysis Predicting Assignment of Responsibility to Situation

Hypothesis	Predictor Variable	B	Partial Correlation	T Value	Level of Significance
H3a	Safety Regulations	-.44613	-.07138	-1.237	.2169
H3b	Safety Warnings	-.56814	-.08964	-1.556	.1207
H3c	Inherent Danger	-.66197	-.10005	-1.739	.0831
H3d	Product Experience	-.02519	-.03398	-0.587	.5570
H3e	Locus of Control	.19514	.18942	3.336	.0010
H3f	Risk Aversion	.06302	.07950	1.379	.1689
H3g	UC	-.18232	-.18120	-3.186	.0016
	Constant	11.99077		6.389	.0000

				Analysis of Variance	
Multiple R	.29403		DF	Sum of Squares	Mean Square
R^2	.08645	Regression	7	279.57476	39.93925
Adjusted R^2	.06507	Residual	299	2954.27541	9.88052
Standard Error	3.14333				

F = 4.0422 Significance F = .0003

seven individual hypotheses regarding assignment of responsibility to the situation.

H3a: A negative relationship exists between willingness to exceed safety regulations and assignment of responsibility to the situation.

Utilizing the same theoretical foundation as H2b, we hypothesize a negative relationship between the manufacturer's willingness to exceed safety standards and ARS. A product safer than required should not result in an accident by chance, rather only through misuse by the consumer. Results presented in Table 4.3a fail to support this hypothesis ($F = 2.107$; $p < .147$). Thus there is no evidence that exceeding safety standards reducing the assignment of responsibility to the situation.

H3b: A negative relationship exists between the prominence of safety warnings and assignment of responsibility to the situation.

Safety warnings serve to make the user aware of dangerous situations and should lessen the risk of injury due to an accident. We hypothesize that heightened awareness of the danger due to more obvious safety warnings should lead the respondent to *discount* situational influences. Research results indicate that H3b should be rejected as no significant relationship exists between safety warnings and ARS ($F = 1.376$; $p < .242$).

H3c: A negative relationship exists between the inherent danger of the product and assignment of responsibility to the situation.

We propose that users of dangerous products realize an injury is always a distinct possibility. Conversely, a injury due to a product considered to be safe is an unusual event, something that occurred due to a unique set of circumstances. This logic leads us to hypothesize that injuries arising from inherently dangerous products are less likely to be attributed to the situation than are those inflicted by safe

products. Statistical tests of H3c reveal a moderate level of significance between inherent danger and ARS ($F = 3.405$; $p < .066$).

H3d: A negative relationship exists between respondent experience with the product and assignment of responsibility to the situation.

Folkes and Kotsos (1986) have illustrated a tendency for individuals who are potential victims themselves to blame victims for their mishaps. We propose that respondents who regularly use the product in question are "potential victims" and, based on Folkes and Kotsos observation, will tend to blame the victim, rather than the situation for accidents. Research results reveal no relationship exists between respondent product experience and ARS ($F = 0.372$; $p < .542$). Therefore H3d should be rejected.

H3e: A positive relationship exists between respondent external locus of control and assignment of responsibility to the situation.

External locus of control individuals "believe that their outcomes are determined by agents or factors extrinsic to themselves, for example fate, luck, (or) chance " (MacDonald 1973, p. 169). We hypothesize that individuals with an external locus will naturally assign greater responsibility for the accident to the situation. The research data strongly support this hypothesis ($F = 11.847$; $p < .001$). Thus this study provides empirical evidence in support of the hypothesis that external locus of control tends to increase assignment of responsibility to the situation.

H3f: A positive relationship exists between respondent risk aversion and assignment of responsibility to the situation.

A risk averse individual has a propensity to perceive a wide variety of situations as dangerous. We hypothesize that risk aversion will result in a propensity to assign greater responsibility to the situation. However, our analysis of the research data indicates we should reject H3f ($F = .716$; $p < .398$).

H3g: A negative relationship exists between unanticipated consequences and assignment of responsibility to the situation.

The final variable predicting ARS is unanticipated consequences. We posit that unanticipated events tend to be attributed to a specific cause - in this case the manufacturer - rather than to a more general source, such as the situation. Thus H3g hypothesizes that unanticipated events are less likely to be assigned to the situation. The research data lends strong support to this hypothesis ($F = 9.753$; $p < .002$). The data provide support for the belief that UC reduces ARS.

Summary. The analysis of covariance investigating assignment of responsibility to the situation indicates three of the seven proposed hypotheses are supported ($p < .10$). Inherent danger of the product (H3c) is the only experimental factor to display a significant relationship with ARS. Two of the hypothesized covariates, locus of control (H3e) and unanticipated consequences (H3g), are significant predictors of assignment to the situation. Comparing the explained to the total variance shows that the hypothesized predictors explain 7.5% of the variance in ARS.

As an additional test of Hypothesis H3a - H3g, a multiple regression analysis was performed. The results of the regression analysis are directly comparable to the analysis of covariance. The overall regression equation is significant ($F = 4.0422$; $p < .003$) with the predictors explaining 8.6% of the variance in assignment to the situation. In addition, the same three specific hypotheses (H3c, H3e, and H3g) are supported. The partial correlation coefficients indicate that locus of control (.18942) and unanticipated consequences (.18120) are equal in their predictive power, nearly twice that of inherent danger (.10005).

H4a - H4j: Predictors of Empathy Toward the Plaintiff

Substantial research in attribution theory (see Weiner 1974, 1976, and 1985a) indicates that emotional reactions often result from causal ascriptions. Four such affective reactions to the experimental stimuli, based on previous research by Batson and Coke (1981), are included in the dissertation model. The first of these to be discussed is empathy toward the plaintiff (EP). We hypothesize ten variables to be predictors of empathy toward the plaintiff.

The hypothesized variables predicting EP are tested by multiple regression analysis. The results indicate the overall regression equation is significant ($F = 7.0937$; $p < .0000$) and 22.5% of the variance in empathy toward the plaintiff is reproduced. The results of this analysis are presented in Table 4.4.

H4a: A positive relationship exists between unanticipated consequences and empathy toward the plaintiff.

Research has shown that *uncontrollable* events are likely to elicit the emotional responses of *anger* and *pity* (Weiner 1985a). Assuming that unanticipated events are perceived as uncontrollable, we hypothesize that UC will increase feelings of empathy toward the plaintiff. Analysis of the research data fails to support H4a ($T = 0.109$; $p < .9136$), suggesting that unanticipated consequences of product usage are not related to feelings of empathy toward the plaintiff.

H4b: A positive relationship exists between assignment of responsibility to the situation and empathy toward the plaintiff.

As stated in H4a, Weiner (1985a) suggests that uncontrollable events tend to result in feelings of anger or pity. Since assignment of responsibility to the situation (rather than to the plaintiff) infers lack of control on behalf of the plaintiff, we propose that ARS relates

Table 4.4

Regression Analysis Predicting Empathy Toward the Plaintiff

Hypothesis	Predictor Variable	B	Partial Correlation	T Value	Level of Significance
H4a	UC	-.02328	-.00633	-0.109	.9136
H4b	Assignment to Situation	.40639	.13485	2.333	.0203
H4c	Assignment to Manufacturer	.52654	.26312	4.676	.0000
H4d	Sympathy	.80111	.27802	4.963	.0000
H4e	Romantic Values	.21250	.04800	0.824	.4106
H4e	Security Values	-.18948	-.02751	-0.472	.6374
H4e	Idealistic Values	.07288	.02900	0.498	.6192
H4f	Locus of Control	.35405	.10591	1.826	.0688
H4g	Product Experience	-.06818	-.03112	-0.534	.5939
H4h	Jealousy	-.01416	-.00425	-0.073	.9419
H4i	Wealth Distribution	.11368	.03367	0.578	.5639
H4j	Income	-.02965	-.03359	-0.576	.5648
	Constant	-10.65557		-1.266	.2066

Multiple R	.47383
R^2	.22451
Adjusted R^2	.19286
Standard Error	9.50492

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	12	7689.75711	640.81309
Residual	294	26560.99208	90.34351

F = 7.0937 Significance F = .0000

positively to EP. The research data support this hypothesis ($T = 2.333$; $p < .0203$). Thus the evidence suggests that attributing blame for the accident to situational influences is accompanied by increased feelings of empathy toward the injured party.

H4c: A positive relationship exists between assignment of responsibility to the manufacturer and empathy toward the plaintiff.

Assignment of responsibility to the manufacturer infers that the defendant had some control over the cause of the accident (Shaver 1985). Thus, based on Weiner's research (1985a), feelings of pity toward the plaintiff are hypothesized to result. Results of multiple regression analysis support H4c ($T = 4.676$; $p < .0000$). Therefore, individuals in the sample blaming the defendant for the accident are likely to feel empathy toward the plaintiff.

H4d: A positive relationship exists between respondent sympathy and empathy toward the plaintiff.

We hypothesize that sympathy, as a general personality trait, is positively related to empathy toward the plaintiff. In other words, respondents who are naturally more disposed toward sympathetic feelings will demonstrate these feelings as empathy toward the plaintiff. Research results support this hypothesis ($T = 4.963$; $p < .0000$), providing strong evidence that sympathy is positively related to EP.

H4e: A positive relationship exists between respondent terminal values and empathy toward the plaintiff.

Rokeach has identified a set of *terminal values* which we use to "heap praise and fix blame" (Rokeach 1973, p. 13). We propose that terminal values are operant in a consumer's evaluation of product-related injuries. Specifically, we hypothesize that more strongly held values will result in empathy toward the plaintiff. Testing this hypothesis by multiple regression analysis reveals no significant relationship for any of the three dimensions of personal values

(for romantic values, T = 0.824; p < .4106; security values, T = 0.472; p < .6374; idealistic values, T = 0.498; p < .6192).

H4f: A positive relationship exists between respondent external locus of control and empathy toward the plaintiff.

Based on Weiner's (1985a) research, we propose that uncontrollable events lead to feelings of pity for the victim. Since external locus respondents feel they lack control over events in their lives, and assuming the *false consensus effect* (Ross, Greene, and House 1977), we hypothesize they will display greater empathy toward the plaintiff than internal locus respondents. The research data provide some evidence that this relationship exists in the population (T = 1.826; p < .0688).

H4g: A positive relationship exists between respondent experience with the product and empathy toward the plaintiff.

We suggest that when a respondent possesses substantial experience with the product, they are aware of the potential danger of using that product. We hypothesize that an experienced user will relate to a consumer injured by the product and feel empathy toward this unfortunate person. However, research data fail to support this logic (T = 0.534; p < 5939).

H4h: A negative relationship exists between respondent jealousy and empathy toward the plaintiff.

We propose that a jealous respondent will view the plaintiff as being in a position to reap a financial windfall, whereas the respondent remains mired in his/her current financial predicament. Thus we hypothesize an inverse relationship between respondent jealousy and empathy toward the plaintiff. Analysis of the research data fails to reveal a significant relationship between these constructs (T = 0.073; p < .9419).

H4i: A positive relationship exists between respondent attitude toward distribution of wealth and empathy toward the plaintiff.

We propose that a respondent in favor of more equal distribution of wealth in society will perceive an undesirable inequity between an injured plaintiff and the resources of the defendant firm. Therefore we hypothesize a positive relationship between respondent attitude toward distribution of wealth and empathy toward the plaintiff. The results of this study fail to provide support for H4i ($T = 0.578$; $p < .5639$).

H4j: A negative relationship exists between respondent income and empathy toward the plaintiff.

H4j suggests that as their income increases, respondents will exhibit less empathy toward the plaintiff. Analysis of the research data, however, reveals no significant relationship between respondent income and EP ($T = 0.576$; $p < .5648$). Thus no empirical proof is found that wealthier respondents feel less empathy toward product liability plaintiffs.

Summary. Ten variables are hypothesized as predictors of empathy toward the plaintiff. As can be seen in Table 4.4, the multiple regression equation testing these hypotheses is statistically significant ($F = 7.0937$; $p < .0000$). The coefficient of determination indicates that the predictor variables explain 22.5% of the variance in empathy toward the plaintiff.

Four of the hypothesized independent measures, assignment to the situation (H4b), assignment to the manufacturer (h4c), sympathy (H4d), and locus of control (H4f), significantly relate to empathy toward the plaintiff. Comparison of the partial correlation coefficients shows that sympathy (.27802) and assignment to the manufacturer (.26312) have roughly equal explanatory power, about twice that of assignment to the situation (.13485) and locus of control (.10591).

H5a - H5j: Predictors of Distress Toward the Plaintiff

The second affective reaction to the experimental stimuli included in the dissertation model is distress toward the plaintiff (DP). Personal distress is defined as an "egoistic desire to reduce one's own distress" (Batson, et al. 1983, p. 706). We hypothesize three predictors of distress toward the plaintiff, assignment to the manufacturer (H5a), sympathy (H5b), and personal values (H5c).

The hypotheses predicting distress toward the plaintiff are tested by multiple regression analysis. The results show the overall regression equation is significant ($F = 5.73068$; $p < .0000$), and the coefficient of determination indicates 8.7% of the variance in the dependent variable is explained by the hypothesized predictor variables. The results of the analysis testing H5a - H5c are presented in Table 4.5.

H5a: A positive relationship exists between assignment of responsibility to the manufacturer and distress toward the plaintiff.

A key element in constructing the hypotheses regarding affective reactions is Weiner's (1985a, p. 562) claim that "the perceived controllability of a cause for a negative outcome in part determines whether anger or pity is directed toward another." When a respondent blames the manufacturer for the accident, s/he infers the manufacturer has some degree of control over the incident (Shaver 1985). From this theoretical background, we hypothesize a positive relationship between ARM and DP. Empirically, the research data provides evidence in support of H5a ($T = 3.535$; $p < .0005$).

H5b: A positive relationship exists between respondent sympathy and distress toward the plaintiff.

Sympathy, as a general personality trait, is hypothesized to be positively related to distress toward the plaintiff. As depicted in Table 4.5, the research data support this proposition ($T = 2.753$;

Table 4.5

Regression Analysis Predicting Distress Toward the Plaintiff

Hypothesis	Predictor Variable	B	Partial Correlation	T Value	Level of Significance
H5a	Assignment to Manufacturer	.29835	.19963	3.535	.0005
H5b	Sympathy	.41272	.15674	2.753	.0063
H5c	Romantic Values	.46291	.10996	1.919	.0559
H5c	Security Values	-.12136	-.01824	-0.316	.7518
H5c	Idealistic Values	.11289	.04524	0.786	.4327
	Constant	.61090	6.52148	0.094	.9254

			Analysis of Variance		
Multiple R	.29482		DF	Sum of Squares	Mean Square
R^2	.08692	Regression	5	2535.42430	507.08486
Adjusted R^2	.07175	Residual	301	26634.26299	88.48592
Standard Error	9.40670				

F = 5.73068 Significance F = .0000

$p < .0063$). Thus this study provides evidence that individuals with a greater propensity to show sympathy will experience distress toward a party suffering from a product-related injury.

H5c: A positive relationship exists between respondent terminal values and distress toward the plaintiff.

H5c hypothesizes that the more strongly held a respondent's *terminal values* (Rokeach 1973), the greater the distress toward the plaintiff. Three dimensions of personal values were empirically derived and tested by multiple regression. The results of the regression analysis reveal one of the three dimensions (romantic) is a significant predictor of DP ($T = 1.919$; $p < .0559$). Therefore H5c is partially supported by the research data.

Summary. Hypotheses H5a - H5c are tested by multiple regression analysis. The results presented in Table 4.5 indicate that the overall regression equation is significant ($F = 5.73068$; $p < .0000$), while explaining 8.7% of the variance in the dependent measure ($R^2 = .08692$).

All three hypotheses receive at least partial support. Assignment of responsibility to the manufacturer is the most influential predictor of distress toward the plaintiff (partial correlation = .19963), followed by sympathy (.15674). One dimension of Rokeach's terminal values is also a significant predictor, with a partial correlation of .10996.

H6a - H6i: Predictors of Empathy Toward the Defendant

In addition to empathy directed toward the plaintiff (EP; H4a - H4j), the research model includes a measure of empathy toward the defendant (ED). While an empathetic reaction toward the manufacturer of the product which caused an injury is not likely to be a common occurrence, we propose that some respondents possess characteristics

Table 4.6

Regression Analysis Predicting Empathy Toward the Defendant

Hypothesis	Predictor Variable	B	Partial Correlation	T Value	Level of Significance
H6a	Assignment to Situation	.22983	.09247	1.595	.1118
H6b	Assignment to Manufacturer	-.11591	-.09233	-1.593	.1123
H6c	Romantic Values	.04354	.01214	0.208	.8350
H6c	Security Values	-.05707	-.01002	-0.172	.8635
H6c	Idealistic Values	.06851	.03408	0.586	.5585
H6d	Locus of Control	-.01185	-.00425	-0.073	.9419
H6e	Conservative Philosophy	.05416	.01347	0.231	.8171
H6f	Business Attitude	.81885	.09704	1.675	.0951
H6g	Jealousy	.14437	.05205	0.895	.3714
H6h	Wealth Distribution	-.31306	-.11122	-1.922	.0555
H6i	Income	-.00957	-.01302	-0.224	.8232
	Constant	13.0540		2.125	.0345

Multiple R	.23351
R^2	.05453
Adjusted R^2	.01927
Standard Error	7.91885

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	11	1066.88761	96.98978
Residual	295	18498.91695	62.70819

F = 1.54668 Significance F = .1142

that will lead them to react in this manner. Specifically, nine variables are hypothesized as predictors of ED.

H6a - H6i are tested with multiple regression analysis and the results reported in Table 4.6. As can be seen in Table 4.6, the regression equation is statistically insignificant ($F = 1.54668$; $p < .1142$) and explains only 5.5% of the variance in the dependent measure. Only two of the nine hypotheses (H6f and H6h) display univariate significance. These two hypotheses are discussed below.

H6f: A positive relationship exists between respondent attitude toward business and empathy toward the defendant.

Folkes (1988) points out that *self-labelling effects* result in an individual behaving in a manner consistent with the labels the apply to themselves. We propose that labeling one's self as pro-business will lead to positive evaluation of the manufacturer, both cognitively and emotionally. Thus we hypothesize that a positive attitude toward business will result in a positive affective reaction toward the manufacturer, namely empathy. Statistical tests of H6f with the research data are marginally significant ($T = 1.675$; $p < .0951$). Therefore, this study provides weak evidence that attitude toward business is related to empathy toward the manufacturer.

H6h: A negative relationship exists between respondent attitude toward distribution of wealth and empathy toward the defendant.

A respondent supporting a more equal distribution of wealth in society would perceive an undesirable inequity between the financial position of the injured plaintiff and that of the manufacturer. Upon witnessing the suffering of the plaintiff, we hypothesize a respondent in favor of equal distribution of wealth is unlikely to muster any empathy toward the defendant firm. This hypothesis is supported by the research data ($T = 1.922$; $p < .0555$).

Summary. Empathy toward the defendant is the only dependent measure not significantly predicted by the research model ($F = 1.54668$; $p < .1142$). In addition, the hypothesized predictors are able to explain just 5.5% of the variance in ED. Two of the nine variables hypothesized to predict ED are marginally significant, attitude toward business (H6f) and wealth distribution (H6h). These two variables have approximately equal partial correlations (.09704 and .11122), representing their unique ability to explain variance in empathy toward the defendant.

H7a - H7f: Predictors of Distress Toward the Defendant

As we have discussed earlier, Weiner (1974, 1976, and 1985a) has conducted substantial research in the attribution field indicating that emotional reactions often result from causal ascriptions. The fourth affective reaction incorporated in the dissertation model is distress toward the defendant (DD). Derived from previous research by Batson and Coke (1981), distress toward the defendant is an emotional expression of anger toward the manufacturer.

We hypothesize six predictors of distress toward the defendant. These hypotheses are tested by multiple regression and the results of the analysis reported in Table 4.7. The results indicate the overall regression equation is significant ($F = 14.86220$; $p < .0000$). The coefficient of determination indicates the hypothesized predictors explain 22.9% of the variance in DD. Discussion of H7a - H7f follows.

H7a: A positive relationship exists between unanticipated consequences and distress toward the defendant.

Weiner's (1985a) research shows that uncontrollable events give rise to emotional reactions such as anger and pity. If the respondent feels that consequences unanticipated by the consumer could have been controlled by the manufacturer, anger toward the defendant should

Table 4.7

Regression Analysis Predicting Distress Toward the Defendant

Hypothesis	Predictor Variable	B	Partial Correlation	T Value	Level of Significance
H7a	UC	.48978	.13844	2.421	.0161
H7b	Assignment to Manufacturer	.50093	.25696	4.605	.0000
H7c	Product Experience	.27925	.13280	2.321	.0210
H7d	Conservative Philosophy	-.44762	-.10000	-1.741	.0828
H7e	Business Attitude	.27842	.02975	0.515	.6066
H7f	Jealousy	.33113	.11341	1.977	.0490
	Constant	-.86077	4.62267	-0.186	.8524

		Analysis of Variance			
Multiple R	.47824		DF	Sum of Squares	Mean Square
R^2	.22871	Regression	6	7508.17445	1251.36241
Adjusted R^2	.21329	Residual	300	25319.94933	84.39983
Standard Error	9.18694				

F = 14.86220 Significance F = .0000

result. Thus we hypothesize that unanticipated consequences will increase DD. Analysis of the research data supports H7a ($T = 2.421$; $p < .0161$), providing evidence that unanticipated consequences of product usage lead to feelings of distress toward the manufacturer.

H7b: A positive relationship exists between assignment of responsibility to the manufacturer and distress toward the defendant.

Following logic similar to that used in the development of H7a, we propose that assignment of responsibility to the manufacturer will result in feelings of distress toward the defendant. Assigning blame for the accident to the manufacturer infers the manufacturer possessed some degree of control (Shaver 1985). Since the manufacturer could have controlled the negative event, anger toward the firm is the expected emotional reaction (Weiner 1985a). The results presented in Table 4.7 provide strong support for this hypothesis ($T = 4.605$; $p < .0000$).

H7c: A positive relationship exists between respondent experience with the product and distress toward the defendant.

A respondent that uses the product presented in the experimental stimuli runs the risk of incurring the same injury as the plaintiff experienced. Recognizing this danger, we expect the respondent to feel anger toward the manufacturer. The results of the analysis of the research data support H7c ($T = 2.321$; $p < .0210$). We conclude that experience with the product that caused the injury leads to feelings of distress toward the producer of the product.

H7d: A negative relationship exists between respondent conservative philosophy and distress toward the defendant.

We propose that respondents with a conservative philosophy possess an emotional affinity toward the business community. From this assumption, we hypothesize that respondents embracing a conservative philosophy are less inclined to display feeling of distress toward the

defendant. Research results provide moderate support for this position ($T = 1.741$; $p < .0828$).

H7e: A negative relationship exists between respondent attitude toward business and distress toward the defendant.

Hypothesis 7e proposes an inverse relationship between business attitude and feelings of distress toward the manufacturer. Tests of this hypothesis indicate that no relationship exists between these two constructs ($T = 0.5151$; $p < .6066$). Thus we reject H7e.

H7f: A positive relationship exists between respondent jealousy and distress toward the defendant.

The final hypothesized predictor of DD is respondent jealousy. We hypothesize that a jealous respondent will experience a negative emotional reaction toward the financially secure manufacturer of the product causing the injury. Table 4.7 presents results in support of this hypothesis ($T = 1.977$; $p < .0490$). Therefore the research data provide empirical evidence that jealous respondents will likely experience feelings of distress toward the manufacturer.

Summary. Six relationships are hypothesized between predictor variables and distress toward the defendant. Overall, the regression equation testing the proposed relationships is statistically significant ($F = 14.86220$; $p < .0000$) and explained 22.9% of the variance in the dependent measure. Five of the six hypothesized relationships are supported by the research data. Examining the unique predictive ability of each of the significant independent variables indicates that assignment of responsibility to the manufacturer (partial correlation = .25696) is almost twice as powerful a predictor as any of the remaining variables. The explanatory power of the other predictors fall in a narrow range (.10000 to .13844; see Table 4.7).

H8a - H8g: Predictors of Jury Award

The final dependent measure in the research model is jury award. Jury award is intended to capture the respondent's global evaluation of the product-related injury. From an attribution theory perspective, jury award represents the *behavioral consequences* resulting from the attribution process (Kelley and Michela 1980; Weiner 1985a). In this study, we hypothesize three categories of predictors of jury award: (1) unanticipated consequences (H8a); (2) assignment of responsibility to the manufacturer (H8b) and situation (H8c); and (3) the four affective reactions, empathy toward the plaintiff (H8d) and defendant (H8e) and distress toward the plaintiff (H8f) and defendant (H8g). Thus seven specific variables are hypothesized to predict jury award.

The hypotheses predicting jury award are tested with multiple regression analysis. The results of this analysis are presented in Table 4.8. The overall regression equation is highly significant ($F = 60.76825$; $p < .0000$) and explains well over half of the variance ($R^2 = .58723$) in jury award. Discussion of each of the seven specific hypotheses follows.

H8a: A positive relationship exists between unanticipated consequences and jury award.

We hypothesize that unanticipated consequences will increase jury award. Based on disconfirmation theory research (see Churchill and Surprenant 1982), we can see that disconfirmed expectations tend to result in dissatisfaction. We propose that unanticipated consequences parallel disconfirmed expectations and will result in dissatisfaction with the manufacturer - in this particular case expressed as a higher jury award. However, the empirical test of this hypothesis reveals no significant relationship between UC and jury award ($T = 1.403$; $p < .1616$).

Table 4.8

Regression Analysis Predicting Jury Verdict

Hypothesis	Predictor Variable	B	Partial Correlation	T Value	Level of Significance
H8a	UC	.03007	.08088	1.403	.1616
H8b	Assignment to Manufacturer	.13597	.54560	11.257	.0000
H8c	Assignment to Situation	.01097	-.03600	-0.623	.5339
H8d	Empathy toward Plaintiff	.01993	.15324	2.681	.0077
H8e	Empathy toward Defendant	-.02066	-.13846	-2.418	.0162
H8f	Distress toward Plaintiff	-.00934	-.06020	-1.043	.2979
H8g	Distress toward Defendant	.02384	.16982	2.980	.0031
	Constant	-.21603		-0.575	.5656

		Analysis of Variance			
Multiple R	.76631		DF	Sum of Squares	Mean Square
R^2	.58723	Regression	7	399.99485	57.14212
Adjusted R^2	.57757	Residual	299	281.15825	.94033
Standard Error	.96971				

F = 60.76825 Significance F = .0000

H8b: A positive relationship exists between the assignment of responsibility to the manufacturer and jury award.

A sense of equity, combined with the legal philosophy of negligence, dictates that the party responsible for the accident should bear the cost. Thus the greater the responsibility of the manufacturer, the higher the award the plaintiff should receive, leading us to hypothesize a positive relationship between ARM and jury award. This relationship is strongly supported by the research data ($T = 11.257$; $p < .0000$), providing evidence that a strong, positive relationship exists between assignment of responsibility to the manufacturer and jury award.

H8c: A negative relationship exists between the assignment of responsibility to the situation and jury award.

Based on similar logic as hypothesis 8b, we propose that assigning responsibility to the situation will reduce jury award. In other words, we hypothesize that attributing the blame for the accident to a source other than the manufacturer lowers the jury award. The present study fails to provide support for H8c ($T = 0.623$; $p < .5339$).

H8d: A positive relationship exists between empathy toward the plaintiff and jury award.

Batson et al. (1983, p. 706) define empathy as "an altruistic desire to reduce the distress of the person in need." Therefore, a person experiencing empathy toward the plaintiff should act to improve the plaintiff's plight. In this case, helping behavior is expressed in the form of a higher jury award, leading us to hypothesize a positive relationship between EP and jury award. Previous empirical support for H8d is provided by Darden et al. (1991). The present research data yields additional evidence of the relationship depicted by H8d ($T = 2.681$; $p < .0077$).

H8e: A negative relationship exists between empathy toward the defendant and jury award.

As stated in the discussion of hypothesis 8d, empathy results in a desire to reduce the suffering of the person in need. We hypothesize that a respondent experiencing empathy toward the defendant would manifest this feeling by reducing jury award. Results of the regression analysis provide support for H8e ($T = 2.418$; $p < .0162$). Thus we have empirical evidence that empathy toward the manufacturer results in a reduced jury award.

H8f: A negative relationship exists between distress toward the plaintiff and jury award.

Personal distress is defined as "an egoistic desire to reduce one's own distress" (Batson and Coke 1983, p. 706). In other words, an individual experiencing personal distress is motivated to aid themselves rather than the person they witness suffering. An individual experiencing personal distress helps only when they are unable to escape exposure to the victim's suffering. However, in a liability case an individual experiencing personal distress toward the plaintiff is unable to "escape" the victim's suffering. Thus we hypothesize the individual will seek to "punish" the party responsible for creating the distress. Distress toward the plaintiff can be punished by reducing the award. This hypothesis, however, is not consistent with the research data ($T = 1.043$; $p < .2979$).

H8g: A positive relationship exists between distress toward the defendant and jury award.

The reasoning presented in the discussion of H8f provides the theoretical explanation for H8g as well. In this case, however, distress toward the defendant is hypothesized to be manifested by an increase in jury award. This hypothesis is supported by the research data ($T = 2.980$; $p < .0031$). Thus we have evidence that an individual experiencing distress toward the defendant will seek to alleviate this feeling by increasing jury award.

Summary. Jury award is the final dependent measure in the research model. We hypothesize seven predictors of jury award which explain 58.7% of the variance in the dependent measure. As can be seen in Table 4.8, four of the seven hypotheses (assignment to the manufacturer (H8b), empathy toward the plaintiff (H8d), empathy toward the defendant (H8e), and distress toward the defendant (H8g)) are statistically significant. Comparison of the partial correlation coefficients of the significant predictors indicates that assignment to the manufacturer is by far the best predictor of jury award (partial correlation = .54560). The other three predictors all possess considerable explanatory power, with partial correlations ranging from .13846 to .16982.

Summary

Chapter four presents the results of the statistical tests of the research hypotheses. Separate analyses were conducted for each of the eight dependent measures incorporated in the research model. A summary of the results of these eight analyses is presented in Table 4.9.

Seven of the overall equations tested are statistical significance ($p < .001$). Only the equation predicting empathy toward the defendant fails to display multivariate significance ($F = 1.54668$; $p < .1142$). The hypothesized predictors of empathy toward the defendant are capable of explaining only 5% of the variance in this construct. In addition to statistical significance, the explanatory power of the proposed predictor variables is important in demonstrating practical relevance. In this study, while statistically significant, less than 10% of the variance in assignment of responsibility to the situation and distress toward the plaintiff are explained by the predictor variables. Conversely, the variables hypothesized to relate to the remaining dependent measures are powerful predictors. Over 50% of the variance in assignment of responsibility to the manufacturer ($R^2 = .506$) and jury award ($R^2 = .587$), and over 20% of the variance in empathy toward the

Table 4.9

Summary of Analysis of Research Models

Dependent Variable	F-Statistic	Level of Significance	R^2
Unanticipated Consequences	10.85	.0000	.178
Assignment of Responsibility to the Manufacturer	30.29	.0000	.506
Assignment of Responsibility to the Situation	4.04	.0003	.087
Empathy Toward the Plaintiff	7.09	.0000	.225
Distress Toward the Plaintiff	5.73	.0000	.087
Empathy Toward the Defendant	1.55	.1142	.055
Distress Toward the Defendant	14.86	.0000	.229
Jury Award	60.77	.0000	.587

Table 4.10

Summary of Analysis of Research Hypotheses

DEPENDENT MEASURE	Hypothesis	Predictor Variable	Hypothesized Relationship	Outcome	
UNANTICIPATED CONSEQUENCES	H1a	Product Experience	Negative	Supported	p < .05
	H1b	Risk Aversion	Negative	Supported	p < .01
	H1c	Safety Warnings	Negative	Supported	p < .01
	H1d	Level of Service	Negative	Rejected	-------
	H1e	Safety in Advertising	Positive	Supported	p < .01
	H1f	Inherent Danger	Negative	Supported	p < .01
ASSIGNMENT OF RESPONSIBILITY TO MANUFACTURER	H2a	Level of Service	Positive	Rejected	-------
	H2b	Safety Regulations	Negative	Supported	p < .05
	H2c	Safety Warnings	Negative	Supported	p < .01
	H2d	Safety in Advertising	Positive	Supported	p < .10
	H2e	Inherent Danger	Negative	Supported	p < .01
	H2f	Product Experience	Negative	Rejected	-------
	H2g	Conservative Philosophy	Negative	Supported	p < .05
	H2h	Business Attitude	Negative	Supported	p < .10
	H2i	Jealousy	Positive	Supported	p < .01
	H2j	Unanticipated Consequences	Positive	Supported	p < .01
ASSIGNMENT OF RESPONSIBILITY TO SITUATION	H3a	Safety Regulations	Negative	Rejected	-------
	H3b	Safety Warnings	Negative	Rejected	-------
	H3c	Inherent Danger	Negative	Supported	p < .10
	H3d	Product Experience	Negative	Rejected	-------
	H3e	Locus of Control	Positive	Supported	p < .01
	H3f	Risk Aversion	Positive	Rejected	-------
	H3g	Unanticipated Consequences	Negative	Supported	p < .01
EMPATHY TOWARD THE PLAINTIFF	H4a	Unanticipated Consequences	Positive	Rejected	-------
	H4b	Assignment to Situation	Positive	Supported	p < .05
	H4c	Assignment to Manufacturer	Positive	Supported	p < .01
	H4d	Sympathy	Positive	Supported	p < .01
	H4e	Terminal Values	Positive	Rejected	-------
	H4f	Locus of Control	Positive	Supported	p < .10
	H4g	Product Experience	Positive	Rejected	-------
	H4h	Jealousy	Negative	Rejected	-------
	H4i	Distribution of Wealth	Positive	Rejected	-------
	H4j	Income	Negative	Rejected	-------

Table 4.10, cont.

Summary of Analysis of Research Hypotheses

DEPENDENT MEASURE	Hypothesis	Predictor Variable	Hypothesized Relationship	Outcome	
DISTRESS TOWARD THE PLAINTIFF	H5a	Assignment to Manufacturer	Positive	Supported	p < .01
	H5b	Sympathy	Positive	Supported	p < .01
	H5c	Terminal Values	Positive	Partial	p < .05
EMPATHY TOWARD THE DEFENDANT	H6a	Assignment to Situation	Positive	Rejected	-------
	H6b	Assignment to Manufacturer	Negative	Rejected	-------
	H6c	Terminal Values	Negative	Rejected	-------
	H6d	Locus of Control	Positive	Rejected	-------
	H6e	Conservative Philosophy	Positive	Rejected	-------
	H6f	Business Attitude	Positive	Supported	p < .10
	H6g	Jealousy	Negative	Rejected	-------
	H6h	Distribution of Wealth	Negative	Supported	p < .05
	H6i	Income	Positive	Rejected	-------
DISTRESS TOWARD THE DEFENDANT	H7a	Unanticipated Consequences	Positive	Supported	p < .01
	H7b	Assignment to Manufacturer	Positive	Supported	p < .01
	H7c	Product Experience	Positive	Supported	p < .05
	H7d	Conservative Philosophy	Negative	Supported	p < .10
	H7e	Business Attitude	Negative	Rejected	-------
	H7f	Jealousy	Positive	Supported	p < .05
JURY AWARD	H8a	Unanticipated Consequences	Positive	Rejected	-------
	H8b	Assignment to Manufacturer	Positive	Supported	p < .01
	H8c	Assignment to Situation	Negative	Rejected	-------
	H8d	Empathy Toward Plaintiff	Positive	Supported	p < .01
	H8e	Empathy Toward Defendant	Negative	Supported	p < .01
	H8f	Distress Toward Plaintiff	Negative	Rejected	-------
	H8g	Distress Toward Defendant	Positive	Supported	p < .01

plaintiff (R^2 = .225) and distress toward the defendant (R^2 = .229), is explained by the predictor variables. In sum, seven of the eight equations display statistical significance and a substantial proportion of the variance is explained in five of the dependent measures.

Assessing the univariate results allows us to test each specific hypothesis. The hypotheses and the results of data analysis testing each hypothesis are summarized in Table 4.10. Of fifty-eight total hypotheses, thirty-three (57%) are supported by the analysis of the research data. Of these thirty-three hypotheses, nineteen are significant at the .01 level, eight at the .05 level, and six display marginal statistical significance ($p < .10$).

Nearly one-half (twelve) of the individual hypotheses not supported by the research data are hypothesized to predict two dependent measures - assignment of responsibility to the situation and empathy toward the defendant. As can be seen in Table 4.10, five of the seven variables hypothesized to predict assignment to the situation and seven of the nine hypothesized predictors of sympathy toward the defendant are insignificant. Disregarding these two constructs, twenty-nine of the remaining forty-two hypotheses (69%) are supported by the data.

Overall, analysis of the data provide substantial support for the proposed model and research hypotheses. In particular, the ability of the predictor variables to explain the variance in two critical constructs, assignment of blame to the manufacturer and jury award, is exceptionally high.

CHAPTER FIVE

DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH

Introduction

Chapter Five concludes this study. We first present a general discussion of the research results. From the discussion of the results, we provide implications for (1) theory development, (2) marketing management, and (3) public policy formation. While the discussion is structured around these three topical areas for organizational purposes, we acknowledge that the boundaries are somewhat blurred. That is, some of the findings are relevant for more than one area, just as implications for any one area also affect the others. The chapter concludes by offering recommendations for future research to expand our knowledge of the product liability process.

Discussion of the Results

For the most part, the results of the study tend to support the proposed attributional model of the liability process and the research hypotheses developed from the model. Thirty-three of the fifty-eight research hypotheses are supported by the analysis of the research data ($p < .10$). The supported hypotheses provide evidence that both factors controllable by marketing managers and individual difference characteristics of consumer-jurors impact the assessment of product-related injuries. At the same time, the study offers support for the theoretical structure of the attributional process proposed by Kelley and Michela (1980), refined by Weiner (1985a), and further developed in the current study. This section presents a general discussion of the research results.

Experimental Factors

Five experimental factors are tested in this study: (1) inherent danger of the product, (2) safety warnings, (3) safety in advertisements, (4) safety regulations, and (5) level of retailer service. The experimental factors were identified through a review of prior research and a series of focus group interviews. These five factors are an integral part of the study, as they represent managerially-controllable elements of the marketing mix hypothesized to influence consumer evaluations of product-related injuries. The results of the hypotheses regarding the experimental factors are discussed below.

Inherent Danger. We propose that products naturally vary in regard to their perceived danger of use (see Rethans and Albaum 1981). In turn, we feel that the inherent danger of the product will influence how consumer-jurors evaluate product liability cases. More precisely, we hypothesize that in a liability case involving an inherently dangerous product, consumers will better anticipate the risk of injury, assign greater responsibility to the user, and reduce attributions of blame to situational influences. The results of the study support each of these proposed relationships.

Inherent danger is the most important predictor of unanticipated consequences. Consumers are expected to recognize that some products are, by their very nature, dangerous to use. Furthermore, the results indicate that when injured by a dangerous product, both the manufacturer and situation are discounted as possible causes and the consumer is held responsible. Thus when a consumer chooses to use a dangerous product, s/he must be prepared to accept the consequences.

Safety Warnings. Safety warnings are hypothesized to make consumers more aware of the potential danger of using a product, lowering

unanticipated consequences. At the same time, obvious safety warnings are expected to reduce the attributions of blame toward the manufacturer and the situation. The first two hypotheses are supported; safety warnings are negatively related to unanticipated consequences and assignment of responsibility to the manufacturer. No significant relationship was found between safety warnings and assignment to the situation.

The results regarding safety warnings are consistent with those of inherent danger. We propose that by providing obvious safety warnings, any good essentially becomes an inherently dangerous product. As a result, the potential negative consequences of product usage become more apparent, reducing UC. Furthermore, the results suggest that consumers feel manufacturers have an obligation to provide adequate warnings and, failing to do so, are held responsible for any ensuing injury. Overall, the role of safety warnings in product liability suits is an important one, from both a legal and behavioral perspective.

Safety in Advertisements. Some debate exists over the wisdom of manufacturers stressing safety in promotional activities for their products. For example, Busch and Hair (1980) surveyed manufacturing executives, insurance executives, and state insurance commissions, finding that all three felt that a strong record of safety is a competitive advantage. However, they also report that "61% of the manufacturing executives believed that a good safety record is *not* able to be advertised or promoted" (Busch and Hair 1980, p. 497). The current study investigates this issue from the consumer-juror's perspective.

We hypothesize that by stressing safety in advertising a manufacturer raises consumer safety expectations of that product, making an injury less anticipated and increasing the assignment of responsibility for an injury to the manufacturer. Results of the study

support both hypotheses. While stressing safety in advertisements may be an effective advertising appeal, manufacturers must be aware of the risk involved. Consumers will hold a manufacturer to the standard inferred by the promotional activity and attribute greater blame for a product-related injury.

Safety Regulations. While governmental regulations specify the legal safety standards for many consumer products, these standards represent the minimum specifications that the product must meet. We propose that consumers will view products that exceed governmental safety standards as even safer than necessary. These "safer products" will lead consumer-jurors to attribute less blame for product injuries to the manufacturer or situational factors; fixing the blame on the user of the product.

Analysis of the research data supports one of these hypothesized relationships. Respondents attribute less responsibility for a product-related injury to the manufacturer when safety regulations have been exceeded. Although the primary objective of exceeding safety regulations is to prevent an injury, it appears that even when an injury occurs the manufacturer can benefit from having done so. Since exceeding safety regulations reduces blame toward the manufacturer, the likelihood the injured party will file suit may be reduced or the manufacturer may receive more favorable treatment by jurors if the case does go to trial.

Level of Service. We hypothesize that as level of service provided by the retailer increases, consumers will become more aware of potential injuries, reducing unanticipated consequences. Higher levels of retailer service were also expected to increase attributions of responsibility for the accident to the manufacturer. However, the

results of the data analysis reveal no relationship exists between level of service and either of the dependent measures.

The hypotheses regarding level of service are intuitively appealing, yet receive no support. We can offer three possible explanations for the lack of results regarding level of retailer service. First, it is possible that the experimental manipulation for this factor was not strong enough to elicit respondent reaction. While extensive pretesting of the experimental scenarios leads us to discount this as the most likely explanation, it remains a possibility. Second, the dependent measure employed for assignment of responsibility did not specifically identify the retailer, but rather named the "product manufacturer" as the base of responsibility. Respondents may have discriminated between the manufacturer and the retailer, refusing to blame the manufacturer for what they perceived as the retailer's actions and responsibility. If this is the case, manufacturers may not be held accountable for actions taken by retailers of their products. Finally, the results we report could be valid. In other words, level of retailer service may not play a significant role in consumer evaluation of product liability cases. At this point, we can not definitely determine the reason for the lack of results, but offer these alternative explanations for consideration in future research.

Response Constructs

Eight dependent variables are included in the research model tested here. While the equations modelling seven of the eight dependent variables are statistically significant ($p < .001$), the explanatory power of the models differ substantially (R^2s ranging from .055 to .587). Specifically, the hypothesized predictors of assignment of responsibility to the situation ($R^2 = .087$), distress toward the plaintiff ($R^2 = .087$), and empathy toward the defendant ($R^2 = .055$) do not demonstrate much explanatory power. On the other hand, the

independent variables are capable of explaining a substantial amount of variance in unanticipated consequences (R^2 = .178), empathy toward the plaintiff (R^2 = .225), and distress toward the defendant (R^2 = .229), and over one-half of the variance in assignment of responsibility to the manufacturer (R^2 = .506) and jury award (R^2 = .587). Each of the dependent constructs are discussed individually below.

Unanticipated Consequences. Wong and Weiner (1981) provide some evidence that unexpected events are more likely to elicit causal attributions than expected events. However, the present study represents the first research to incorporate explicitly a measure of how unanticipated the event actually is within an attributional model. We specified factors expected to influence unanticipated consequences as well the role of UC as a predictor of assignment of responsibility, affective reaction, and jury award.

The hypothesized predictors of unanticipated consequences are based largely on the concept of search, experience, and credence properties advanced by Darby and Karni (1973) and Nelson (1974). The factors expected to influence UC are those the consumer is exposed to before actually using the product: (1) product warning labels, (2) level of service provided by the retailer, (3) safety in advertisements, and (4) inherent danger of the product. In addition, two individual difference characteristics, (5) experience with the product and (6) risk aversion, are hypothesized predictors of UC. Of the six variables, only level of retailer service is not significantly related to unanticipated consequences and the predictors are able to explain nearly 20% of the variance in UC.

Based on these results we offer several observations. First, inherent danger is the most influential predictor of UC; respondents expect the user of an inherently dangerous product to be aware of the risk of injury. Second, by stressing safety in advertising,

manufacturers raise consumer expectations of product safety and must be prepared to meet those expectations. Third, safety warnings play an important role in making consumers aware of product danger. Finally, not all consumers will view the same product in an identical manner, but experience with the product and an individual's level of risk aversion may affect the perceptions of danger.

UC is hypothesized to influence assignment of responsibility to the manufacturer and situation, empathy toward the plaintiff, distress toward the defendant, and jury award. The results of the study reveal that unanticipated consequences is an important predictor of assignment of responsibility to both the situation and the manufacturer. If the injury is unanticipated, causal ascriptions to the situation are reduced, while the manufacturer receives greater blame. It appears that manufacturers are expected to make the consumer aware of any possible danger and, failing to do so, assume the responsibility for an unexpected product injury. In addition, distress toward the defendant increases with unanticipated consequences. However, UC has no direct effect on the other affective measures or jury award.

In sum, this study provides an initial examination of unanticipated negative consequences of product usage. Analysis of the research data indicates that we were able to identify some of the determinants of UC and can do a fair job of predicting the construct. In addition, the data provides further evidence that unexpected events lead to stronger causal attributions.

Assignment of Responsibility. Several interesting findings of the present study concern the bases of responsibility. The most elemental is the actual identification of the appropriate causal agents. Derived from earlier attribution research (Kelley 1967 and McArthur 1972), Bettman (1979) suggests that the bases of responsibility for attributional studies of consumer behavior are (1) the consumer, (2) the

product, and (3) the situation. Folkes (1984) successfully utilized these categories in a study of causal attributions of product failure. Based on these studies, the consumer, the product/manufacturer, and the situation were selected for inclusion in the current research.

During pretesting, however, attributions to the consumer and product/manufacturer consistently displayed a high negative correlation. Thus it appears that respondents blame either the product or the consumer, but not both. On the other hand, the situation exhibited low correlation with the other two bases. While Folkes (1984) had treated the three bases as independent measures, she did not report any test of correlation or factor structure. Since the correlations among these measures remained very stable across two pretests and the final study, future researchers should be aware that these bases may not be independent and should design the collection of data and statistical analysis with this in mind.

Assignment to the Situation. Based on the results of the current study, attributions to the situation appear difficult to explain (R^2 = .087). In particular, the managerially-controllable elements expected to predict ARS (safety regulations and warnings) do not directly relate to the construct. The strongest predictor of ARS in this study is locus of control. Consistent with Rotter's (1966, p. 3) formulation of this construct, an individual who generally perceives events as being "controlled by forces outside of himself" is likely to attribute product-related injuries to situational factors. In addition, when the accident is perceived as being unanticipated, individuals are less likely to blame the situation. This is consistent with Lerner and Miller's (1978) *Just World Hypothesis* - the world is orderly and an individual's pursuits will not be blocked by environmental interference. Therefore unanticipated events are not due to situational influences,

but rather "require for their occurrence a greater causal role by the victim or perpetrator" (Kelley and Michela 1980, p. 476).

As a predictor variable, it was hypothesized that assigning responsibility to the situation would result in feelings of empathy toward the plaintiff and defendant. In other words, since the accident occurred just by chance, the respondent will express sympathy toward both the consumer and the manufacturer that this unfortunate event occurred. In addition, we felt that assigning responsibility to situational influences would reduce the manufacturer's obligation, lowering jury award. However, the data only provide support for the positive relationship between ARS and empathy toward the plaintiff.

Overall, the ability to explain assignment of responsibility to the situation is somewhat disappointing. We offer two plausible explanations for the weak explanatory results found in this study. First, it is possible that when evaluating an event as negative as a product-related injury, most individuals possess a natural desire to assign the blame to something more concrete than situational influences. That is, they want to hold some*thing* responsible. If this is true, ARS simply should not be expected to play much of role in the attributional process. Alternatively, these results may be a function of the research methodology employed. That is, exposure to the legal protocols and responding to the dependent measures may induce respondents to blame the consumer or manufacturer rather than the situation. Nonetheless, it is likely that a juror in a product liability trial would be similarly encouraged to place the blame on the plaintiff or defendant, as opposed to the situation. Either way, the role of situational factors in the assignment of responsibility for a product liability accident appears to be minimal.

The study also fails to correctly specify the role of ARS as a predictor variable in the liability process. If the explanations offered above are accepted, then assignment of responsibility to the

situation is not likely to be a good predictor of the other dependent measures included in the study. However, it remains possible that ARS is a significant predictor of behavioral consequences which are not incorporated into the current research model. For example, the respondent's future purchase intentions regarding the product and/or manufacturer may be related to assignment of responsibility to the situation.

Assignment to the Manufacturer. As discussed above, assignment to the manufacturer actually reflects the respondent's feelings regarding both the consumer's and manufacturer's blame for the accident. Since we feel that most individuals belief in a sense of equity, this construct is expected to play a major role in the attributional process and the determination of a jury award. The results of the study support this supposition. The research model is able to both explain a majority of the variance in ARM (R^2 = .505), as well as illustrate the influence of ARM on affective reactions and jury award.

All five firm-related factors are hypothesized to influence assignment of responsibility to the manufacturer. Three of these, safety regulations, safety warnings, and inherent product danger are significant predictors of ARM. The data shows that by exceeding safety regulations and providing adequate warnings of danger, the attribution of blame to the manufacturer can be reduced. At the same time, respondents tend to hold consumers responsible for injuries they receive when using an inherently dangerous product. Thus when consumers choose to use a product with knowledge of the danger involved, they must be prepared to assume the risk of injury. However, when the danger is less evident, due to either lack of safety warnings or low inherent danger of the product, the manufacturer is likely to be held responsible for any ensuing injury.

Assignment to the manufacturer is also a powerful predictor of affective reaction and jury award. In fact, ARM is the most influential predictor of distress toward the plaintiff, distress toward the defendant, and jury award, and the second most important predictor of empathy toward the plaintiff. When consumer-jurors blame the manufacturer for an injury, they display compassion for the injured party and feelings of anger toward the perpetrator. Furthermore, blaming the manufacturer translates directly into a higher award to the plaintiff.

From the results of the data analysis it is apparent that respondents place a great deal of importance on the assignment of responsibility to the manufacturer. The results are consistent with equity theory (Adams 1963) and the legal philosophy of negligence - the party responsible for the accident should bear the cost involved. As a result of both direct and indirect effects (through the affective measures), assigning responsibility for the accident to the manufacturer leads to a higher award to the plaintiff.

Affective Reaction. The research model depicts four affective reactions intervening between assignment of responsibility and jury award. Based on research by Batson and Coke (1981), empathy toward the plaintiff and defendant, along with distress toward the plaintiff and defendant, are hypothesized to be operant emotions when evaluating product liability incidents. Analysis of the research data reveals mixed results in regard to the affective measures.

The hypothesized predictors are able to explain nearly one-quarter of the variance in two of these constructs - empathy toward the plaintiff and distress toward the defendant. However, the proposed variables do a poor job of predicting the other two affective measures. In fact, empathy toward the defendant is the only dependent variable not significantly explained by the hypothesized predictors. There is little

question that feelings of sympathy and compassion toward someone injured by a product are likely to be more prevalent than the same feelings toward the manufacturer of the product. Similarly, being upset and disturbed by the manufacturer of a product that inflicted an injury is a more common affective reaction than displaying these emotions toward the injured party. These two emotions, empathy toward the plaintiff and distress toward the defendant, appear to be more rational responses which are easier to predict.

The results of this study indicate that the specific causal attributions an individual draws are closely related to the emotions that individual experiences. For example, assigning responsibility for the accident to the manufacturer results in both feelings of empathy and distress toward the injured party, as well as distress toward the manufacturer. On the other hand, assigning blame for the injury to situational factors tends to increase empathy toward the plaintiff, but is unrelated to the other emotions. Unanticipated injuries (UC) also increase distress toward the manufacturer, but have no impact on empathy toward the plaintiff.

Individual difference characteristics also help to determine emotional reactions. In particular, predispositions for or against one of the parties involved in the litigation tend to result in emotions favoring that party. For instance, a pro-business attitude increases empathy toward the defendant, while a conservative political philosophy decreases distress toward the defendant. In addition, individuals who are naturally sympathetic exhibit a tendency to feel both empathy and distress toward the plaintiff. These results provide evidence that consumer-jurors possess relatively stable personality traits which influence their perceptions and emotional reactions to product-related injuries.

The relationship between the emotional reactions and jury award is also interesting. Batson, O'Quin, Fultz, Vanderplas, and Isen (1983,

p. 706) claim "Personal distress produces an egoistic desire to reduce one's own distress; empathy, an altruistic desire to reduce the distress of the person in need." Batson, Coke, and their colleagues (Coke, Batson, and McDavis 1978; Batson and Coke 1981; Batson, Duncan, Ackerman, Buckley, and Birch 1981; Batson et al. 1983) hypothesize that empathy will lead to helping behavior regardless of situational factors. On the other hand, those experiencing personal distress will attempt to help only when they are unable to "escape" exposure to the victim's suffering. However, in developing our research hypotheses we point out that a juror (or a participant in this study) is unable to escape the plaintiff's suffering. We propose that this individual will seek to punish the party responsible for creating the distress by increasing or decreasing the jury award.

The results of the study support three of our four hypothesized relationships between the affective reactions and jury award. Specifically, empathy toward the plaintiff and distress toward the defendant both raise jury award, while empathy toward the defendant reduces the award. Based on our results, we propose that previous studies of these emotional reactions may have been constrained by the experimental context. When presented with the opportunity, an individual experiencing personal distress may actually respond in an aggressive manner rather than attempting to escape. At the same time, this study provides evidence from a different context corroborating Batson and Coke's findings that feelings of empathy tend to result in actions to alleviate the victim's suffering.

Jury Award. In the current study, jury award is the final dependent variable representing the respondent's overall evaluation of the liability incident. Pretesting revealed a high correlation between our measures of jury award and measures of satisfaction with the firm and future purchase intentions. We hypothesized unanticipated consequences,

assignment to the manufacturer and situation, and the four affective reactions as predictors of jury award. Results of the data analysis show that four of these constructs are significantly related to jury award. Assignment to the manufacturer, empathy toward the plaintiff and defendant, and distress toward the defendant all influence jury award in the hypothesized direction. Thus we are able to explain nearly 60% of the variance in jury award with just a few direct effects.

The results indicate that attribution of blame for the accident is by far the most important predictor of jury award. When respondents attribute the accident to the manufacturer, they feel compelled to provide the injured party with greater compensation. Conversely, if the consumer is held responsible a lower jury award is likely. Such a relationship appears fair and equitable; those responsible for the accident must shoulder the burden. These relationships appear to represent a cognitive evaluation of the event.

However, product liability cases seem to possess an emotional element as well - affective reactions which influence jury award. Darden et al. (1991) report that empathy toward the plaintiff is positively related to jury award. The current study confirms and extends this earlier work. Not only is empathy toward the plaintiff positively related to jury award, but empathy toward the defendant exhibits an equal and opposite effect, reducing jury award. In addition, feelings of distress toward the defendant also increase jury award. Thus this research provides additional information regarding the role of emotions in the liability process. It appears that both positive and negative affect, directed toward both the plaintiff and defendant, can influence jury awards.

Summary

The results of this study indicate that both firm-related factors and individual difference characteristics influence consumer evaluation

of product liability cases. The attributional model developed in this manuscript, while not fully (or in some cases properly) specified, receives substantial support and explains the preponderance of variance in the final dependent measure, jury award. From the discussion of the results we can make several observations:

- Attribution theory provides a useful theoretical approach to investigating the product liability process.
- The specific causal ascription drawn is the single most important predictor of both emotional and behavioral consequences.
- Unanticipated consequences of product use lead to stronger attributions of blame for product-related injuries. Incorporating a measure of UC in an attributional model provides a more accurate picture of the attributional process.
- Managerial marketing decisions play an important role in consumer assessment of product liability cases. Through judicious decision making, manufacturers can both better protect their customers and insulate themselves from product liability litigation.
- Not every consumer evaluates the same product-related injury in an identical manner. Individual difference characteristics, including experience with the product, risk aversion, locus of control, and political ideology, influence consumer assessment of liability cases.
- The more strongly held emotions, empathy toward the plaintiff and distress toward the defendant, are far better explained by the proposed model than distress toward the plaintiff and empathy toward the defendant.
- Jury award can be largely explained by attributions of blame, empathy toward the plaintiff and defendant, and distress toward the defendant.
- The basic model developed in the study appears to correctly specify the attributional process. The proposed sequence of **causal antecedents——>causal ascriptions——>affective reaction——>behavioral consequences** seems to accurately reflect consumers valuative sequence.

Implications of the Study

The previous section provides a general discussion of the results of this study. More explicit implications for theory development, marketing management, and public policy formation are provided in this section. A summary of the implications concludes this section.

Theoretical Implications

Attribution Theory. This study offers several theoretical implications. Perhaps the most elemental is simply recognizing the appropriateness of attribution theory as a basis for researching the product liability process. The model developed in this study expands on attribution models suggested previously by Kelly and Michela (1980) and Weiner (1985a). Thus the study contributes to our knowledge base by applying and explicitly operationalizing basic attribution concepts within the product liability context. Some of the specific implications for attribution research follow.

Almost twenty-five years ago, Kelley (1967, p. 194) established three dimensions of causal inferences that have been widely adopted: (1) the stimulus *object*, (2) the *person* observing the event, and (3) the *context* in which the event occurs. Based on Kelley's dimensions, Bettman (1979) proposed that the consumer, the product, and situational factors are the appropriate bases of responsibility for attributional studies of consumer behavior. Consumer behavior researchers have utilized these three dimensions in earlier attribution studies (see Folkes 1984 for a specific example and Folkes 1988 for a review). Qualitative research conducted for the current study appeared to confirm these attributional bases. However, quantitative pretesting across two samples indicated that attributions to the consumer and product/manufacturer were not independent, but displayed a high negative correlation. Analysis of the research data gathered from a separate population displayed the same results. Thus it appears that the consumer and the product/manufacturer are at opposite ends of a single dimension. However, situation factors exhibited low correlation with the other two bases. While it is possible that these correlations are observed only in the context of product-related injuries, similar relationships may exist in related areas of consumer research (i.e. product recalls, negative publicity, product failure, etc.). The

consistency of the correlations among these measures across three data sets suggests future researchers should be aware that these bases may not be appropriate for consumer research, at least should not be treated independently.

Closely related is the most suitable term to capture *causality*. Shaver (1985) presents a well developed theoretical argument that attributions of *blame* are not identical to attributions of *responsibility*. Consequently, asking a consumer to assign responsibility for a product-related injury is not the same as assigning blame. However, both pretests and the final data analysis reveal a correlation exceeding .80 between these measures. Therefore, while Shaver is able to eloquently differentiate between the two concepts conceptually, respondents struggle to distinguish between them empirically. Based on these results the terms *blame* and *responsibility* were used interchangeably in this study. Utilizing both terms, and perhaps others such as culpability, fault, causality, and accountability, may enable future researchers to develop more valid and reliable measures of attributions.

The inclusion of unanticipated consequences in an attributional model also represents a theoretical advancement. Weiner (1982, 1985b) suggests that unexpected negative events motivate the perceiver to make causal ascriptions. However, limited empirical evidence has been offered in support of this proposition (see Wong and Weiner 1981). The current study provides evidence of this effect, as unanticipated consequences are found to strongly correlate with both attributions to the manufacturers and to the situation. In addition, the study illustrates the intervening role of unanticipated consequences between causal antecedents and causal ascriptions. Although in need of much further development, unanticipated consequences is an interesting concept and holds substantial promise for future research.

Weiner (1985a) contends that attributions regarding the "controllability" of an event influence the emotional reaction the observer experiences. Specifically, negative events that could have been controlled are likely to elicit anger, while uncontrollable events result in pity. This study expands our knowledge of these relationships by providing empirical evidence that events that could or should have been controlled by the manufacturer result in anger (H5a, H7a, and H7b). In addition, uncontrollable events are found to lead to feelings of pity (H4b and H4c). While we have long recognized that controllability is a relevant dimension when attributing causality (see Rosenbaum 1972), this new information suggests that controllability is directly related to affective reactions as well.

The final contribution regarding attribution theory is more global, based on the entire research model. As Folkes (1988) has pointed out, attribution studies have tended to focus on *either* the antecedents *or* the consequences of causal attributions. This research not only considers both, but expands the causal sequence to include causal antecedents, causal ascriptions, affective reactions, and behavioral consequences. Although the current study focused on testing specific hypotheses as opposed to the entire model, there is evidence supporting the extended model of the attribution process.

Results of the data analysis provide support for the causal antecedents——>causal ascriptions link (see hypotheses H2b, H2c, H2d, H2e, H2g, H2h, H2i, H2j, H3c, H3g, and H3e), as well as causal ascriptions——>affective reactions (H4b, H4c, H5a, and H7b) and affective reactions——>behavioral consequences (H8d, H8e, and H8g). However, the study shows that this sequence is not without exception, as causal ascriptions can also have direct effects on behavioral consequences (H8b). At the same time, the results suggest that these exceptions are rare. Together the hypotheses provide evidence that the proposed attributional sequence correctly captures consumer evaluation

of product-related injuries. While this model was developed specifically for investigating the product liability context, the more general form could well be generalizable to other contexts as well.

Emotional Reactions. Batson and Coke (1981; Coke, Batson, and McDavis 1978; Batson et al. 1981; Batson et al. 1983) have developed a theory of an individual's emotional response to witnessing another person's suffering. Batson and Coke have extensively tested and refined their measures of empathy and personal distress. Across all of their studies, these researchers have found that experiencing empathy results in an altruistic desire to help the suffering party, while experiencing personal distress produces an egoistic motivation to eliminate the distress. In each case, an avenue of escape was provided for the experimental subjects to avoid witnessing the suffering. This study extends our theoretical knowledge of these constructs by applying them in a new context and eliminating the ability to escape. The results of the current study support the proposition that experiencing empathy leads an individual to help the suffering party (H8d and H8e). However, a person experiencing personal distress, and lacking an avenue of escape, can actually resort to aggressive acts. In this case, the act of aggression is punishing the offending party by providing an increased jury award (H8g). Thus when forced to endure personal distress without the option of escape, an individual may seek to retaliate.

Just World Hypotheses. Lerner and Miller (1978) propose that the world in which we live is fair, equitable, and in general an orderly place. Thus an individual's pursuits will not be blocked by environmental interference. While Lerner and Miller's *Just World Hypotheses* is not a fully constructed theory, it does provide a useful conceptual framework for posing research hypotheses. In the current study, three research hypotheses are based on the Lerner and Miller's propositions. All three

of these hypotheses (H2j, H3g, and H7a) are supported by the research data. The results of this study suggest that the *Just World Hypothesis* is a valuable aid for attribution researchers and deserves further consideration.

Summary. This study provides several theoretical advancements and implications for future research. This research is based predominantly on attribution theory and yields the majority of implications for attributional research. In addition, the study extends our knowledge of other divergent theoretical bases including an individual's emotional reactions to witnessing suffering and the *Just World Hypotheses*.

Managerial Implications

The results of the study provide valuable information regarding the product liability process for marketing managers. Of particular interest are those findings dealing with the experimental factors. These factors represent marketing mix variables that are largely under managerial control. Thus the effect these factors have on consumer perceptions of the product liability process delineates areas where marketing professionals can influence liability litigation.

Experimental Factors. We have discussed the important role that unanticipated consequences plays in the attribution of blame for product-related injuries. The results of the study indicate that unanticipated injuries tend to shift causal ascriptions from the consumer to the manufacturer. In other words, consumers strongly believe that the manufacturer has a responsibility to make the user of the product aware of any potential danger. Results of the current study indicate that lack of safety warnings and stressing safety in advertisements for the product lead consumers to believe the product is less dangerous than it actually is. Since manufacturers have a legal

duty to warn, any injury inflicted by such a product is likely to result in legal action seeking compensation for the victim. Furthermore, the unanticipated nature of the injury is likely to result in favorable treatment of the plaintiff by consumer-jurors.

Since safety warnings and advertising message also have a direct effect on ARM, the clear implication for marketing management is to make the consumer aware of the potential danger of using the product. However, there may be a fine line between fulfilling the obligation of making the consumer aware and scaring consumers away from the product by making it appear more dangerous than it actually is. This is analogous to the application of the disconfirmation paradigm in consumer satisfaction; establishing too high of expectations will lead to consumer dissatisfaction while too low of expectations will prevent consumers from trying the product in the first place. In this particular situation, while using safety as a theme in promotional activities may effectively increase market share, the manufacturer must be prepared to meet heightened consumer expectations, or risk increased exposure to liability litigation.

Inherent danger of the product is also negatively related to unanticipated consequences. A product widely perceived as dangerous will reduce UC and, indirectly, the assignment of blame to the manufacturer. In addition, a direct negative relationship exists between inherent danger and assignment to the manufacturer. Thus injuries inflicted by products that are actually perceived as being safe are more likely to result in causal ascriptions to the manufacturer than are injuries caused by inherently dangerous goods. Managers must be aware of these relationships when determining their relative exposure to product liability risks. That is, simply because products have a lower perceived risk of injury does not necessarily dictate that correspondingly lower levels of liability insurance are required. At the same time, efforts to prevent injuries resulting from the use of

these products may be even more difficult to enact. For instance, consumers may be less motivated to read and obey safety warnings and follow the directions when using a product they consider to be safe. The potential damages to both the consumer and the manufacturer are substantial.

The case of *Walker v. Maybelline Co.* (1985) provides an illustration of this effect. This case involves a tube of mascara, a product few of us would perceive as inherently dangerous. Ms. Walker failed to read the directions for use and the warning labels for the mascara, both before and after she scratched her eye when applying the cosmetic. Ms. Walker subsequently developed an infection that ultimately resulted in the loss of vision in her injured eye. The plaintiff acknowledge that she had not seen the warning and would not have read the warning even if she had. Thus, even the most effective product labeling and warning would not have prevented the injury. Nonetheless, the plaintiff was awarded $426,584.35 in compensation for her injury (see *Walker v. Maybelline Co.* 1985, p. 1140). In cases like this, there is no winner.

The results suggest that exceeding governmental safety regulations is one method manufacturers have of reducing attributions of blame for product-related injuries. Exceeding safety regulations may be beneficial from two perspectives. First, exceeding safety requirements is likely to result in a safer product, one less likely to inflict an injury to start with. Thus managers should consider the marginal cost and benefit involved in designing and manufacturing product beyond what is mandated by law. However, the results of this study suggest that a secondary benefit may exist as well. Even if an injury does occur, consumer-jurors appear to give the manufacturer's additional efforts some weight in assigning causality for the accident. In other words, when jurors who recognize that the manufacturer voluntarily exceeded safety regulations they are less likely to blame the firm for the

injury. However, under the currently dominant legal philosophy of strict liability, defendants may be prevented from even presenting such information in a jury trial (this is discussed further under implications for public policy). Nonetheless, there appears to be little to lose by exceeding government-specified safety regulations.

Individual Difference Characteristics. Some of the individual difference characteristics found to influence consumer evaluation of product-related injuries also have managerial implications. For instance, the consumer's experience with the product was found to be related to unanticipated consequences and, indirectly, assignment of blame to the manufacturer. Logically, a consumer who has used the product and is familiar with its operation should be more aware of potential danger. The results of the study support this assumption, as product experience has a significant negative relationship with UC. Based on this finding, we can offer two suggestions for manufacturers. First, providing training for the users of potentially harmful products may be beneficial. Training programs can be a surrogate for actual experience, allowing users to get accustomed to the product, learn how to use it properly, and be made aware of the danger involved, under supervised conditions. While this approach may be cost effective for major purchases, it may appear cost prohibitive for the majority of consumer products. However, even with these less expensive products it may be feasible to sponsor group seminars at appropriate locations, providing instruction and safe use of the product. With the average product liability settlement rapidly approaching $1,000,000, preventing even a single accident could provide substantial financial resources for these proposed training programs. Second, labeling products ***FOR PROFESSIONAL USE ONLY*** or ***TO BE USED ONLY BY TRAINED PROFESSIONALS*** may impress on the consumer the need for specialized skill and knowledge, encouraging them to seek outside assistance when using

potentially dangerous products. At the very least, such labels serve as warnings to consumers that experience with the product is required for safe use, a potentially helpful defense if an injury does occur.

Priest (1988, p. 789) proposes that "consumers differ substantially in personal characteristics and in preferences for product reliability and safety." This proposition is supported by the results of the current study which indicate that individual difference characteristics (i.e., risk aversion, political ideology, attitude toward business, jealousy, locus of control, sympathy, etc.) were found to significantly effect the evaluation of a product-related injury. Taken as a whole, these results indicate that wide variation exists among consumers not only in their expectations of product safety, but in the assignment of blame for product-related injuries, attitudes toward product liability litigation, and, most likely, their propensity to seek redress through the court for personal injuries. Thus a segmentation approach based on the characteristics in this study and desired level of product safety may enable manufacturers to better serve the marketplace, while reducing costs and liability exposure. In addition, the study shows that, by their very nature, individuals exist with predispositions both for and against the defendant firm in a product liability trial. Although not the focus of this research, the results provide some guidelines that could prove beneficial in the jury selection process should a liability case go to court.

Affective Reaction. This research further investigated the role of emotional responses to witnessing another's suffering previously studied by Batson and Coke (1981). The results substantiate earlier claims that two very different emotional reactions to suffering can arise, empathy and personal distress. An individual experiencing empathy was found to be highly motivated to reduce the suffering of the person in need. Conversely, personal distress leads to an egoistic desire to escape the

suffering or, as illustrated in this study, punish the offender. Managers should be aware of the role these emotions play in the product liability process as discussed earlier. However, the implications for marketers go beyond the context currently studied. For example, consider the promotional efforts utilized by many non-profit organizations to secure donations. It is crucial that these promotional appeals, constructed to tug on the public's heartstrings, elicit empathy rather than personal distress. It is possible that some organizations, with their candid portrayal of human suffering, may actually be alienating potential donors by evoking personal distress.

Summary. The current study yields several managerial implications. Perhaps the most important implications regard how managerially-controllable elements of the marketing mix can influence consumer evaluation of product liability suits. Specifically, the study found that by using a safety theme in promotional activity, having less explicit warning labels, and merely complying with safety regulations all result in increased attributions of blame to the manufacturer. A fourth firm-factor, the perceived inherent danger of the product, also influences attributions of blame. Some suggestions were offered concerning how managers can best utilize these new insights. In addition, implications regarding individual difference characteristics and emotional reactions were discussed.

Public Policy Implications

According to Munger (1988), *normative effects* legal theory proposes that our laws are (or should be) isomorphic with the desires of society at large. In other words, the laws of our country should

reflect the beliefs of its citizens. However, the current study suggests at least one area where the natural tendency of consumers and liability laws are amiss.

Strict Liability v. Negligence. The results of the study show that consumers consider the actions of the manufacturer to be important information when assigning responsibility for a product accident. But, as Priest (1988, p. 783) states, "It has become ritual in products liability cases to affirm that, in contrast to the focus of negligence on the conduct of the parties to an accident (injurer and victim), the focus of strict liability is on the product itself, irrespective of culpability of the behavior of either of the parties leading to the injury." In the current study, exceeding government safety regulations is information consumers gave considerable weight when evaluating the liability case, but this information would not be relevant under the legal doctrine of strict liability. Thus it appears that consumers, being legally naive, choose to apply the doctrines of negligence rather than strict liability.

The strong relationship between assignment of responsibility for the accident and jury award also reflects concepts of negligence rather than strict liability. For example, consider strict liability as described in *Jackson v. Coast Paint and Lacquer Company* (1974, p. 809): "It is not essential to strict liability that the product be defective ... product may be perfectly manufactured and meet every requirement for designed utility and still be unreasonably dangerous." Or, in the case of *Phillips v. Kimwood Machine Co.* (1974), "In a strict liability case we are talking about the condition (dangerousness) of an article ..., while in negligence we are talking about the reasonableness of the manufacturer's actions." It is our interpretation of the results of this study that consumers are indeed concerned with the manufacturer's

actions. Furthermore, we suggest that under the current policy of strict liability, the manufacturer's incentive to design and "carefully manufacturer" a safer product is greatly reduced. Thus, not only would a shift to the legal theory of negligence make public policy more isomorphic with societal views, but ultimately could result in safer products as well.

Judges v. Juries. Another public policy issue centers on the appropriateness of consumers serving as jurors in product liability cases. According to Friedman (1986, p. 7), judges presiding over product liability cases "conceive their roles as mere conduits to carry every case to the jury, where other consumers are sitting as jurors [and] will decide the case." However, there is concern that consumer-jurors in product liability trials may be unreasonably biased toward the plaintiff (Bacas 1986). Empirical evidence provided by Darden et al. (1991) seems to support this bias, as sympathy toward the plaintiff was determined to be a significant predictor of jury ward. The importance of affect in the liability trial is also evident from the results of this study. Thus jury trials may be won or lost based not on the facts, but on the ability to evoke emotion. Legislation has been proposed to address this situation by limiting the use of juries in liability suits (Settle and Spigelmyer 1984). Based on the results of this study, judges or professional arbitrators may be less emotional and better able to establish more equitable compensation for an injured party. In addition, the expense of jury trials and attorney fees may be reduced, and the backlog in our court system circumvented, allowing the plaintiff faster redress and more equitable compensation for product-related injuries.

Summary. The current study investigates public perceptions regarding product liability litigation. Since laws in our country are intended to be isomorphic with the views of society, the results of this research may be valuable input into the formation of public policy. We discussed implications from this study for two controversial areas; (1) strict liability versus negligence as the more desirable legal philosophy for product liability suits, and (2) judges versus juries as the more appropriate decision making unit regarding compensation for product-related injuries. Certainly this study and our implications will not resolve either issue, but insights from the consumer's perspective do provide additional information from which to evaluate both controversies.

Opportunities for Future Research

While this study expanded our knowledge of the liability process, we remain with a very limited knowledge base on this topic. Thus the product liability field offers ample opportunity for future research. Based on the results of the current study, we can pose several potentially fruitful research areas.

First, the research model developed in this study requires and deserves further attention. Tests of the individual hypotheses suggest that the general model may accurately reflect the consumer thought process. However, this study did not test the model in its entirety, thus we must stop short of drawing this conclusion. Hence the first suggested area of research is to attempt to empirically verify the proposed model.

Second, interactions among the experimental factors may exist. The current study is largely exploratory in nature. It did not hypothesize or propose to test interactions, but focused on the main effects of these factors. It is likely that interaction effects among

these variables is present as well. In particular, the role of inherent danger of the product appears to be of interest. More specifically, inherent danger may prove to be a moderator of the other factors. For instance, does the perceived inherent danger of the product influence consumer assessment of product warnings? Further investigation in this area may provide valuable insight into consumer assessment of liability cases.

Third, how can we make warning labels more effective? This study indicates that product safety warnings play an important role in the assessment of product-related injuries. However, the study does not look into the determinants of an effective warning label. For example, look at the warnings on a bottle of Vick's NyQuil. Does the average consumer take the time to read such a detailed warning? Do they have the ability to comprehend it even if they do? It appears that the function of warning labels may have shifted from one of prevention of injury to one of defense during liability litigation. Warning labels are an important area of consumer safety and deserve additional attention.

Finally, what other variables influence consumer assessment of a product-related injury? The current study investigated a large number of firm-related factors and individual difference characteristics of the consumer, but is far from fully specified. For example, the qualitative research conducted prior to pretesting of the present study identified dozens of firm and plaintiff factors thought to impact the liability process. While this study was restricted to just five of the firm characteristics, the remaining factors should be considered in subsequent research.

Conclusions

> Every court today affirms that the goal of modern products liability law is to protect consumers, but no court today attempts seriously to identify the needs, interests or preferences of the consumers it hopes to protect. The now-extensive and far-reaching corpus of modern products liability law has been and continues to be defined without any attention at all to specific characteristics of consumers. (*Priest* 1988, p. 771)

This study investigates an area of increasing importance to the consumer, marketing practitioner, and society as a whole. Despite the possible consequences of product liability litigation in today's marketplace, only limited academic research on this topic has appeared in the marketing literature. The majority of these articles are nonempirical, relating judicial interpretations of court cases and recent developments in legal doctrine to the needs of the marketing discipline (e.g. Rados 1969; Jensen, Mazze, and Stern 1973; Loudenback and Goebel 1974; Morgan 1979, 1982, 1986, 1987, 1988a, 1988b; Downs and Behrman 1986). In essence, these manuscripts provide the reader with a "managerial primer" on product liability, increasing awareness of potential problems and providing a foundation for empirical research into the influence of product liability on the marketing discipline. Other studies have proposed behavioral models and empirically investigated the role of different players in the litigation process (Busch 1976; Busch and Hair 1980; Mowen 1983; Darden et al. 1991). This approach assesses the differing perspectives and attitudes of jurors and judges, plaintiffs and defendants, and producers and consumers regarding product liability claims. By better understanding the attitudes of these parties, it is believed more effective managerial strategies can be established.

The behavioral perspective is taken in the present research. More specifically, this study complements and expands on previous research by providing a better understanding of consumer evaluation of product

liability cases. To accomplish this objective, this study: (1) reviewed the relevant literature from the marketing, psychology, and legal disciplines; (2) developed an attributional model of the product liability process; (3) examined the influence of selected managerial factors on assessment of responsibility for product-related injuries and jury awards; (4) investigated the role of several individual difference variables in the liability process; and (5) examined the mediating roles of *unanticipated consequences* of product usage, assessment of responsibility for the incident, and affective feelings toward the plaintiff and defendant. Hopefully the study increased our knowledge of the product liability process and ultimately proves to be a valuable step toward understanding the needs, interests, and preferences to which Priest refers.

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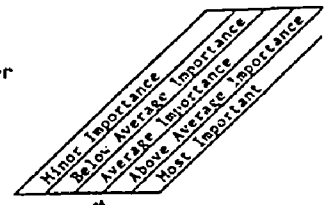
APPENDIX A

PRETEST ONE

INSTRUCTIONS:
We are interested in the **YOUR ATTITUDES** regarding **PRODUCT LIABILITY COURT CASES.** Suppose you have been selected to serve **AS A JUROR** in a court case where a consumer has been injured by a product. The consumer is **SUING THE MANUFACTURER** of the product for medical expenses and pain and suffering. Below is a list of items that may be **IMPORTANT AT ARRIVING AT A VERDICT.** Considering each item separately, please **CIRCLE THE NUMBER** that indicates how **IMPORTANT** that item would be when making your **DETERMINATION OF THE AWARD** the consumer deserves.



Example: Courtesy of the salesman. 1 2 3 (4) 5

1. Extent to which **SAFETY DEVICES** interfere with the product's use 1 2 3 4 5
2. The **FINANCIAL BURDEN** that liability lawsuits place on manufacturers 1 2 3 4 5
3. **QUALITY** of the product. 1 2 3 4 5

4. **SIZE** of the manufacturer. 1 2 3 4 5
5. The **SALESMAN WARNING** the consumer about the dangerous nature of the product . . 1 2 3 4 5
6. Importance of the product in our **EVERYDAY LIVES** 1 2 3 4 5

7. **ABILITY** of the typical consumer to use the product safely 1 2 3 4 5
8. The **SALESPERSON'S RECOMMENDATION** of the purchase of the product 1 2 3 4 5
9. **FREQUENCY** which the **SAME INJURY** has occurred to **OTHER USERS** of the product. . . 1 2 3 4 5

10. **ABSENCE** of appropriate safety devices 1 2 3 4 5
11. Overall **USEFULNESS** of the product 1 2 3 4 5
12. The salesman's willingness to provide **INSTRUCTION ON SAFE USE** of the product. . 1 2 3 4 5

13. The manufacturer's **AWARENESS OF THE POTENTIAL DANGER** of the product 1 2 3 4 5
14. **LEVEL OF SKILL** required to use the product safely 1 2 3 4 5
15. **AMOUNT OF INSTRUCTION** the consumer received regarding operation of the product. 1 2 3 4 5

16. **PRODUCT ENDORSEMENT** by independent sources (such as Consumer Reports) 1 2 3 4 5
17. How **EASILY** the safety devices can **REMOVED** by the consumer 1 2 3 4 5
18. **WHERE** the product was **PURCHASED** (department store, factory outlet, mail order). 1 2 3 4 5

19. The consumer's desire to **PURCHASE THE SAFEST PRODUCT** possible 1 2 3 4 5
20. **IMPACT** of this product on the way we conduct our **DAILY LIVES.** 1 2 3 4 5
21. The **MANUFACTURER'S REPUTATION** for producing safe products 1 2 3 4 5

22. Impact of liability suits on **TECHNOLOGICAL DEVELOPMENT.** 1 2 3 4 5
23. Ability to **FORESEE THE** possibility of **INJURY** when the product was produced. . . 1 2 3 4 5
24. The manufacturer's willingness to **TAKE ACTION** to prevent the injury 1 2 3 4 5

25. Degree to which the consumer **FOLLOWED** the salesman's **DIRECTIONS** for use 1 2 3 4 5
26. The **REMOVAL** of safety devices 1 2 3 4 5
27. **AMOUNT OF CARE** required to safely use the product 1 2 3 4 5

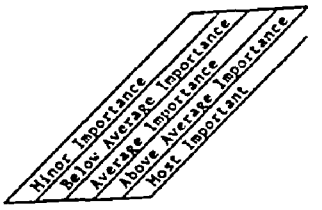
28. The manufacturer's attempts to **ENSURE THE SAFETY** of the consumer. 1 2 3 4 5
29. **COST** of the product relative to alternative products. 1 2 3 4 5
30. How closely the manufacturer follows **GOVERNMENTAL SAFETY REGULATIONS.** 1 2 3 4 5

31. How **LONG** the manufacturer has operated a plant **IN THE COMMUNITY** 1 2 3 4 5
32. The manufacturer's **ABILITY TO PAY** a product liability settlement. 1 2 3 4 5
33. Ability of **OTHER CONSUMERS** to use the product safely. 1 2 3 4 5

34. The consumer's role in **ASSEMBLING** the product 1 2 3 4 5
35. How prominently **SAFETY WARNINGS** are featured on the **PACKAGE** 1 2 3 4 5
36. The **PORTION OF THE PRICE** of the product attributed to liability suits 1 2 3 4 5

37. How **ACTIVE** the manufacturer is in **COMMUNITY AFFAIRS** 1 2 3 4 5
38. Importance of **FORMAL TRAINING** in safe use of the product. 1 2 3 4 5
39. Presence of **INSURANCE** to cover such mishaps 1 2 3 4 5

40. The manufacturer's **FINANCIAL RESOURCES.** 1 2 3 4 5
41. **IMPORTANCE OF PRICE** in the purchase decision. 1 2 3 4 5
42. The **SALESMAN'S** level of **KNOWLEDGE** regarding safe use of the product 1 2 3 4 5



43. How obvious **SAFETY WARNINGS** are on the package. 1 2 3 4 5
44. **LIKELIHOOD** that misuse of the product will result in physical harm. 1 2 3 4 5
45. The manufacturer's ability to **ANTICIPATE** the injury 1 2 3 4 5

46. How much the consumer **RELIED ON THE SALESMAN** in purchasing the product. 1 2 3 4 5
47. Number of **SAFETY FEATURES REQUIRED** by law 1 2 3 4 5
48. Amount of **SAFETY INFORMATION** provided by **ADVERTISEMENTS** 1 2 3 4 5

49. How prominently **ADVERTISEMENTS** stress the safety of the product 1 2 3 4 5
50. **LEVEL OF SERVICE** provided by the retailer 1 2 3 4 5
51. Importance of following the **INSTRUCTIONS** to avoid injury. 1 2 3 4 5

52. The manufacturer's importance in the **LOCAL ECONOMY**. 1 2 3 4 5
53. **NUMBER** of consumers using the product **SAFELY**. 1 2 3 4 5
54. Consumer efforts to **INTENTIONALLY** defeat safety devices 1 2 3 4 5

55. The manufacturer's **LIABILITY INSURANCE** limits 1 2 3 4 5
56. The manufacturer's **SHARE** of the **MARKET**. 1 2 3 4 5
57. Level of **BENEFIT** the product provides the consumer. 1 2 3 4 5

58. How **CAREFULLY** the consumer **READ** the safety warnings 1 2 3 4 5
59. Extent that **PROMOTIONAL ACTIVITIES** emphasize product safety 1 2 3 4 5
60. How **DANGEROUS** the product is to use 1 2 3 4 5

61. The manufacturer's **EFFORTS** to make the product as **SAFE** as possible. 1 2 3 4 5
62. The presence of **CONSUMER INSURANCE** to pay medical expenses. 1 2 3 4 5
63. **DESIRABILITY** of the product's **SAFETY FEATURES** 1 2 3 4 5

64. Ability to **ANTICIPATE** such an injury. 1 2 3 4 5
65. **ADVERTISING CLAIMS** of product safety. 1 2 3 4 5
66. Consumer **FAILURE TO USE** safety features 1 2 3 4 5

67. Level of **TRAINING** required for safe operation of the product. 1 2 3 4 5
68. How closely the consumer **FOLLOWED THE INSTRUCTIONS** for the product's use. . . . 1 2 3 4 5
69. Impact of the product on maintaining our **STANDARD OF LIVING** 1 2 3 4 5

70. **COMPLETENESS** of **INSTRUCTIONS** for use. 1 2 3 4 5
71. Manufacturer's willingness to **RESPOND TO** customer **QUESTIONS** 1 2 3 4 5
72. The manufacturer's importance to the **LOCAL EMPLOYMENT** situation 1 2 3 4 5

73. Importance of the **SALESFORCE** when purchasing the product. 1 2 3 4 5
74. Presence of safety features **BEYOND THOSE REQUIRED** by law. 1 2 3 4 5
75. Customer **FAILURE TO FOLLOW** the salesperson's instructions 1 2 3 4 5

76. The manufacturer's degree of **COMPLIANCE** with governmental **SAFETY REGULATIONS**. . 1 2 3 4 5
77. Impact of liability laws on the **DEVELOPMENT** of safer products 1 2 3 4 5
78. How clearly **SAFETY WARNINGS** were written. 1 2 3 4 5

79. The **MANUFACTURER'S REPUTATION** for caring about its customers. 1 2 3 4 5
80. Completeness of manufacturer's **TRAINING COURSE** for use of this product. 1 2 3 4 5
81. Extent to which the product **EXCEEDED** governmental **SAFETY REQUIREMENTS** 1 2 3 4 5

82. If the product is considered a **LUXURY** or a **NECESSITY**. 1 2 3 4 5
83. Consumer's **KNOWLEDGE** regarding the **POTENTIAL** for injury 1 2 3 4 5

Please describe and rate any other factors that might be important in your decision:

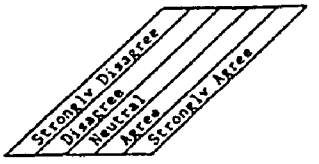
84. _____

_____ 1 2 3 4 5

85. _____

_____ 1 2 3 4 5

Now we would like to ask a few questions about how you perceive the world in general. Please indicate how strongly you **AGREE OR DISAGREE** with each of the following statements by **CIRCLING THE APPROPRIATE RESPONSE:**



1. I feel that I have a number of good qualities 1 2 3 4 5
2. Many times we might just as well decide what to do by flipping a coin 1 2 3 4 5
3. Life today is easier because of products developed by businesses. 1 2 3 4 5

4. When I make plans, I am almost certain that I can make them work. 1 2 3 4 5
5. Consumer welfare is the driving force behind business today 1 2 3 4 5
6. Our country should be constantly engaged in research to develop better weapons. 1 2 3 4 5

7. Politically, I would consider myself a conservative 1 2 3 4 5
8. I am one who likes to actively keep busy. 1 2 3 4 5
9. Taking risks in life can be fun 1 2 3 4 5

10. I feel that I do not have much to be proud of 1 2 3 4 5
11. Most people don't realize the extent that their lives are influenced by chance. 1 2 3 4 5
12. I feel moved when I hear of the plight of other 1 2 3 4 5

13. I usually vote for the conservative candidate 1 2 3 4 5
14. I have very definite goals in life that I intend to pursue at all costs 1 2 3 4 5
15. Many time I feel that I have little influence over things that happen to me . . 1 2 3 4 5

16. I prefer friends that are exciting and unpredictable. 1 2 3 4 5
17. This country should rid itself of nuclear weapons 1 2 3 4 5
18. I can work in the midst of a number of distractions 1 2 3 4 5

19. To get ahead in this world a person has to take chances 1 2 3 4 5
20. I am softhearted regarding the welfare of others. 1 2 3 4 5
21. On the whole, I am satisfied with myself. 1 2 3 4 5

22. I have considered sky diving as a hobby 1 2 3 4 5
23. Most businesses today have the consumer's welfare in mind 1 2 3 4 5
24. I never persist at things very long without giving up 1 2 3 4 5

25. I would like to drive a race car. 1 2 3 4 5
26. Big business is strictly interested in profit 1 2 3 4 5
27. I have a warm feeling for my fellow man 1 2 3 4 5

28. I don't like to have to work hard to get things done. 1 2 3 4 5
29. I feel compassion for people in need. 1 2 3 4 5
30. Most of us are victims of forces that we can't understand nor control 1 2 3 4 5

31. I sometimes do things I know are dangerous just for fun 1 2 3 4 5
32. Many of the unhappy things in people's lives are partly due to bad luck 1 2 3 4 5
33. The average man is getting less than his rightful share of our national wealth. 1 2 3 4 5

34. I certainly feel useless at times 1 2 3 4 5
35. Businesses are concerned about the welfare of society 1 2 3 4 5
36. The government has too much influence in our daily lives. 1 2 3 4 5

37. I feel sympathy for people less fortunate than I. 1 2 3 4 5
38. I wish I could have more respect for myself 1 2 3 4 5
39. Today's businesses are responsible for our increased standard of living 1 2 3 4 5

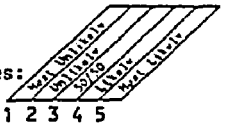
40. I would describe myself as a "tender" person. 1 2 3 4 5
41. I am able to do things as well as most other people 1 2 3 4 5
42. When I decide to do something, I go right to work on it 1 2 3 4 5

The following story is based on an actual product liability case. Please read the story and answer the questions that follow.

Mike Johnson, a twenty-five year old single man, severed three fingers of his left hand while using a portable circular saw designed and manufactured by Ace Tool Company. The accident, according to Mr. Johnson, occurred as follows. He was using the saw to cut a strip of wood off of a sheet of 3/4 inch plywood. He stated that he had clamped the plywood to two saw horses, made his line on the wood, set the saw blade to the proper depth, and positioned himself to begin the cut. While cutting the plywood, he noticed that he was not in position to finish the full length of the cut. As he repositioned his feet, the saw kicked back and up about a foot above the surface of the plywood. At that point, he let go of the saw and it came down on his left hand, severing three fingers. Mr. Johnson claims the saw was defectively designed and should have had a safety device to prevent the injury. Mr. Johnson is suing the manufacturer for his medical expenses, pain and suffering, and punitive damages (damages designed to punish the company). The total amount Mr. Johnson is seeking is $100,000. Ace Tool Company argues that the injury occurred due to Mr. Johnson's carelessness and that the product had the appropriate safety devices and that additional safety features would add to the cost and make the saw more difficult to operate. Therefore, while the company regrets that the injury occurred, they feel that they are not responsible and that no award is due Mr. Johnson.

As a juror, you must assess the liability of the firm and determine the award Mr. Johnson should receive. While Mr. Johnson has filed suit for $100,000, you are free to make any award that you think is reasonable.

Please rate the likelihood that you <u>as a juror</u> would vote for the following damages:



1. **ACQUITTAL** of the manufacturer. 1 2 3 4 5
2. Full **MEDICAL SUPPORT** for the injured party 1 2 3 4 5
3. Full **MEDICAL SUPPORT** for the injured party and **PAIN and SUFFERING**. 1 2 3 4 5
4. Full **MEDICAL SUPPORT** for the injured party, **PAIN and SUFFERING**, and **PUNITIVE DAMAGES** 1 2 3 4 5

5. **IN DOLLARS**, what award do you think the injured party should receive? . . . $_____

Finally, we would like ask a few questions for categorical purposes.

6. Please indicate if you are: (1) Male ____ (2) Female ____

7. Your class standing: (1) Freshman ____ (2) Sophomore ____ (3) Junior ____
(4) Senior ____ (5) Graduate ____

8. What is **YOUR FATHER'S** occupation?
____ 1. Legal profession (lawyer, judge, etc.)
____ 2. Medical profession (doctor, nurse, etc.)
____ 3. Aviation (pilot, FAA, etc.)
____ 4. Management
____ 5. Education (teacher, administrator, etc.)
____ 6. Self-Employed Business Person (store owner, entrepreneur)
____ 7. Insurance Agent
____ 8. Other Professional Occupation
____ 9. Blue Collar Worker (construction, farming, oil field worker, etc.)
____ 10. Other <u>(Please identify)</u>_____

THANK YOU FOR YOUR ASSISTANCE!

APPENDIX B

EXPERIMENTAL SCENARIOS

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An expert witness testified that the hammer met the minimum safety standards established by the Consumer Product Safety Commission for quality of steel and hardness of the hammer head. Mr. Johnson charged that the manufacturer provided inadequate warning of the potential danger of the hammer. Warnings regarding the hammer did not mention the danger of chipping of the hammer head or the potential injury from striking the edge of the hammer, nor did it recommend that the user wear eye protection.

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An expert witness testified that the weed eater far exceeded the safety standards established by the Consumer Product Safety Commission, including the quality of the cutting blade and had additional safety guards for the prevention of injury not found on other models. Ace Tool Company claims that proper warning of the danger involved with use of the weed eater was provided. A label placed on both the handle and the engine of the weed eater clearly warned the user of the danger of flying objects, proper maintenance of the cutting head, and the potential of injury from striking loose gravel, in addition to recommending that the user wear hand and eye protection.

Mike is suing the manufacturer of the weed eater for his medical expenses, pain and suffering, and punitive damages (damages intended to punish the company). The total amount Mr. Johnson is seeking for the loss of vision in his left eye is $250,000. In its defense, Ace cites the fact that thousands of people use its products without any accidents and that proper use of the product is the responsibility of the consumer. Ace feels that the injury is a result of carelessness on the part of Mr. Johnson. Therefore, while the company regrets that the injury has occurred, they feel that they are not responsible and no award is due Mr. Johnson.

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An expert witness testified that the weed eater met the minimum safety standards established by the Consumer Product Safety Commission for the quality of the cutting disk and had the required safety guards. Mr. Johnson charged that the manufacturer failed to provide adequate warning of the potential danger of the weed eater. Warnings regarding the weed eater did not warn the user of the danger of flying objects, proper maintenance of the cutting blade, or the potential of injury from striking loose gravel, nor did it recommend that the user wear hand and eye protection.

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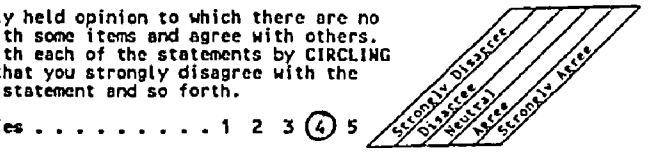
APPENDIX C

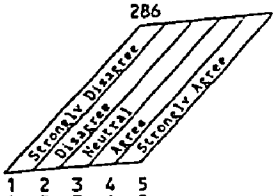
PRETEST TWO

Each of the following statements represents a commonly held opinion to which there are no right or wrong answers. You will probably disagree with some items and agree with others. Please indicate how strongly you AGREE OR DISAGREE with each of the statements by CIRCLING THE APPROPRIATE RESPONSE. Circling a 1 indicates that you strongly disagree with the statement; circle a 5 if you strongly agree with a statement and so forth.



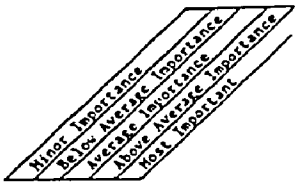
Example: I feel that I have a number of good qualities 1 2 3 (4) 5

1. Only the individual who caused another's misfortune is obligated to help him . . .	1	2	3	4	5
2. The harder a person works, the more they should be paid	1	2	3	4	5
3. You should not be held responsible for someone else's actions	1	2	3	4	5
4. The old saying "You made your bed, now lie in it" is something I believe in	1	2	3	4	5
5. A person's actions should strongly determine their outcomes in life	1	2	3	4	5
6. Good things come to those most deserving	1	2	3	4	5
7. Taking risks can be fun	1	2	3	4	5
8. I would like to drive a race car	1	2	3	4	5
9. I sometimes do things I know are dangerous just for fun	1	2	3	4	5
10. To get ahead in this world a person has to take chances	1	2	3	4	5
11. I have considered sky diving as a hobby	1	2	3	4	5
12. I prefer friends that are unpredictable	1	2	3	4	5
13. Businesses are concerned about the welfare of society	1	2	3	4	5
14. Consumer welfare is the driving force behind business today	1	2	3	4	5
15. Big business is strictly interested in profit	1	2	3	4	5
16. Most businesses today have the consumer's welfare in mind	1	2	3	4	5
17. Most manufacturers are guilty of exploiting the environment	1	2	3	4	5
18. Many of the problems of our society are due to the greed of business	1	2	3	4	5
19. This country should rid itself of nuclear weapons	1	2	3	4	5
20. Politically, I would consider myself a conservative	1	2	3	4	5
21. I usually vote for the conservative candidate	1	2	3	4	5
22. Our country should be constantly engaged in research to develop better weapons . .	1	2	3	4	5
23. The federal government has too much power over citizens	1	2	3	4	5
24. Social welfare programs should be our government's top priority	1	2	3	4	5
25. Greater government control over business would weaken this country's economy . . .	1	2	3	4	5
26. This country's strength is largely a result of the free enterprise system	1	2	3	4	5
27. When something is run by the government, it is likely to be inefficient	1	2	3	4	5
28. The government should assure at least a basic standard of living for everyone . . .	1	2	3	4	5
29. I believe that luck plays an important role in my life	1	2	3	4	5
30. Most of us are victims of forces that we can't control	1	2	3	4	5
31. Often I feel that I have little influence over things that happen to me	1	2	3	4	5
32. Many times we might just as well decide what to do by flipping a coin	1	2	3	4	5
33. When I decide to do something, I go right to work on it	1	2	3	4	5
34. I am one who likes to keep busy	1	2	3	4	5
35. I don't like to have to work hard to get things done	1	2	3	4	5
36. I have very definite goals in life that I intend to pursue at all costs	1	2	3	4	5
37. The right thing to do is to work hard and earn your own living	1	2	3	4	5
38. My dream job combines a minimum amount of labor with a maximum wage	1	2	3	4	5
39. Work is something to be avoided if possible	1	2	3	4	5
40. You should earn your living by honest work	1	2	3	4	5
41. I feel compassion for people in need	1	2	3	4	5
42. I feel sympathy for people less fortunate than I	1	2	3	4	5
43. I have a warm feeling for my fellow man	1	2	3	4	5
44. I am softhearted regarding the welfare of others	1	2	3	4	5
45. I would describe myself as a "tender" person	1	2	3	4	5
46. I feel moved when I hear of the plight of others	1	2	3	4	5
47. Too often criminals go unpunished	1	2	3	4	5
48. Anyone found guilty of a crime should be openly punished to set an example	1	2	3	4	5



49. Everyone has an obligation to criticize those acting in an antisocial manner	1	2	3	4	5
50. Anyone caught cheating on their taxes should be fined as an example to others	1	2	3	4	5
51. Since some criminals are not caught, those that are should be punished severely	1	2	3	4	5
52. I feel sorry for anyone unjustly accused of a crime	1	2	3	4	5
53. Many times people are punished for incidents they are not responsible for	1	2	3	4	5
54. Every person is entitled to a second chance, even after a serious mistake	1	2	3	4	5
55. Many times the penalty is too severe for the crime	1	2	3	4	5
56. Poverty should be done away with by making basic changes in our social system	1	2	3	4	5
57. In a small group everyone should have an equal say	1	2	3	4	5
58. More equal distribution of wealth is likely to stifle individual initiative	1	2	3	4	5
59. The enormous wealth of the very rich should be distributed among all people	1	2	3	4	5
60. Profitable businesses are doing a lot for society by paying heavy taxes	1	2	3	4	5
61. I have to admit that I am sometimes jealous of other people's possessions	1	2	3	4	5
62. I am resentful when others are treated better than I am	1	2	3	4	5
63. Sometimes it seems like other people get all the lucky breaks	1	2	3	4	5
64. I am envious when I hear of someone winning a lot of money in the lottery	1	2	3	4	5
65. One of the main problems with society is our heavy reliance on lawyers	1	2	3	4	5
66. We should be training more engineers and fewer attorneys	1	2	3	4	5
67. People today are too eager to file lawsuits	1	2	3	4	5
68. People should take responsibility for their actions rather than blame others	1	2	3	4	5
69. Many of the lawsuits filed today are needless	1	2	3	4	5
70. Before I vote I thoroughly investigate the qualifications of all the candidates	1	2	3	4	5
71. I have never intensely disliked anyone	1	2	3	4	5
72. On occasion I have my doubts about my ability to succeed in life	1	2	3	4	5
73. My table manners when I eat at home are as good as when I eat in a restaurant	1	2	3	4	5
74. No matter who I'm talking to, I'm always a good listener	1	2	3	4	5
75. I'm always willing to admit it when I make a mistake	1	2	3	4	5
76. There have been occasions when I took advantage of someone	1	2	3	4	5
77. Too often I try to get even, rather than forgive and forget	1	2	3	4	5

The following are 18 personal values. Please indicate how **IMPORTANT** each of the values is to you by **CIRCLING THE APPROPRIATE RESPONSE.**



1. A comfortable life	1	2	3	4	5
2. An exciting life	1	2	3	4	5
3. A sense of accomplishment	1	2	3	4	5
4. A world at peace	1	2	3	4	5
5. A world of beauty	1	2	3	4	5
6. Equality	1	2	3	4	5
7. Family security	1	2	3	4	5
8. Freedom	1	2	3	4	5
9. Happiness	1	2	3	4	5
10. Inner harmony	1	2	3	4	5
11. Mature love	1	2	3	4	5
12. National security	1	2	3	4	5
13. Pleasure	1	2	3	4	5
14. Salvation	1	2	3	4	5
15. Self-respect	1	2	3	4	5
16. Social recognition	1	2	3	4	5
17. True friendship	1	2	3	4	5
18. Wisdom	1	2	3	4	5

INSTRUCTIONS TO THE JUROR:

Assume that you have been chosen to serve as A MEMBER OF A JURY on a PRODUCT LIABILITY CASE. Product liability lawsuits are filed when an individual feels that an injury they received is due to an unsafe product. The following few paragraphs summarize the FACTS OF THE CASE. Please read the information provided carefully - as if YOU ARE A JUROR - then respond to the questions which follow it AS YOU WOULD IN AN ACTUAL TRIAL.

Mike Johnson, a twenty-two year old male, was injured when a fragment of steel from a hammer he was using hit him in the eye. Ultimately, the injury resulted in the loss of sight in his left eye. The hammer was an ordinary claw hammer with curved claws and a wooden handle. Thousands of such hammers are designed and manufactured by Ace Tool Company each year. The hammer was purchased from a local self-serve discount store. Johnson stated that advertisements claiming a "comfortable non-slip handle" were a major reason for selecting the Ace brand.

The accident, according to Mr. Johnson, occurred as follows. Johnson was driving a nail into a wall in his living room to be used as a hanger for a large picture. He struck a "foul blow," hitting the nail with the edge of the hammer. A small chip of steel flew off the edge of the hammer and struck him in the eye, resulting in the injury. Mr. Johnson was not wearing any gloves or protective eye wear at the time of the accident.

An expert witness testified that the hammer met the minimum safety standards established by the Consumer Product Safety Commission for quality of steel and hardness of the hammer head. Mr. Johnson charged that the manufacturer provided inadequate warning of the potential danger of the hammer. Warnings regarding the hammer did not mention the danger of chipping of the hammer head or the potential injury from striking the edge of the hammer, nor did it recommend that the user wear eye protection.

Mike is suing the manufacturer of the hammer for his medical expenses, pain and suffering, and punitive damages (damages intended to punish the company). The total amount Mr. Johnson is seeking for the loss of vision in his left eye is $250,000. In its defense, Ace cites the fact that thousands of people use its products without any accidents and that proper use of the product is the responsibility of the consumer. Ace feels that the injury is a result of carelessness on the part of Mr. Johnson. Therefore, while the company regrets that the injury has occurred, they feel that they are not responsible and no award is due Mr. Johnson.

RESPONSIBILITIES OF THE JUROR: As a juror, you will be asked to evaluate the facts presented during the trial. You must weigh the evidence provided and determine who was at fault. In addition, you must assess the liability of the firm and determine the award Mr. Johnson should receive. While Mr. Johnson has filed suit for $250,000,
you are free to make any award that you think is reasonable. BASED ON THE CASE you just read, please respond to the following questions by circling the appropriate response:

21. How responsible was Mike Johnson for the accident?

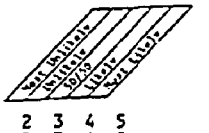
No Responsibility <----------> Completely Responsible
1 2 3 4 5 6 7

22. How responsible was the product manufacturer for the accident?

No Responsibility <----------> Completely Responsible
1 2 3 4 5 6 7

23. How responsible was fate or the circumstances for the accident?

No Responsibility <----------> Completely Responsible
1 2 3 4 5 6 7



Please rate the likelihood that you as a juror would vote
for the following damages:

24. ACQUITTAL (not guilty) of the manufacturer 1 2 3 4 5
25. Full MEDICAL SUPPORT for the injured party 1 2 3 4 5
26. Full MEDICAL SUPPORT for the injured party and PAIN and SUFFERING 1 2 3 4 5
27. Full MEDICAL SUPPORT for the injured party, PAIN and SUFFERING,
and PUNITIVE DAMAGES 1 2 3 4 5

28. AS A JUROR, you would be asked to determine HOW MUCH COMPENSATION Mike Johnson should receive for his injury. While Mr. Johnson has filed his suit for $250,000, you are free to make any award that you think is reasonable. Which of the following amounts most closely corresponds to the award you think Mr. Johnson should receive?

(1) $0 (2) $50,000 (3) $125,000 (4) $250,000 (5) $375,000 (6) $500,000 (7) Maximum

Now we would like you to tell us **HOW THE CASE MADE YOU FEEL.** Please circle the number that best indicates how strongly you felt each of these feelings **TOWARD MIKE JOHNSON.**

When I think of **MIKE JOHNSON,** I feel:

		Did not feel this feeling at all						Felt this feeling very strongly
29.	Alarmed	1	2	3	4	5	6	7
30.	Grieved	1	2	3	4	5	6	7
31.	Upset	1	2	3	4	5	6	7
32.	Worried	1	2	3	4	5	6	7
33.	Disturbed	1	2	3	4	5	6	7
34.	Perturbed	1	2	3	4	5	6	7
35.	Distressed	1	2	3	4	5	6	7
36.	Troubled	1	2	3	4	5	6	7
37.	Sympathetic	1	2	3	4	5	6	7
38.	Moved	1	2	3	4	5	6	7
39.	Compassionate	1	2	3	4	5	6	7
40.	Tender	1	2	3	4	5	6	7
41.	Warm	1	2	3	4	5	6	7
42.	Softhearted	1	2	3	4	5	6	7
43.	Suspicious	1	2	3	4	5	6	7
44.	Sad	1	2	3	4	5	6	7
45.	Pleasant	1	2	3	4	5	6	7
46.	Positive	1	2	3	4	5	6	7
47.	Favorable	1	2	3	4	5	6	7
48.	Negative	1	2	3	4	5	6	7
49.	Dislike	1	2	3	4	5	6	7

How did the case make you feel **TOWARD THE MANUFACTURER.**

When I think of **ACE TOOL COMPANY** I feel:

		Did not feel this feeling at all						Felt this feeling very strongly
50.	Alarmed	1	2	3	4	5	6	7
51.	Grieved	1	2	3	4	5	6	7
52.	Upset	1	2	3	4	5	6	7
53.	Worried	1	2	3	4	5	6	7
54.	Disturbed	1	2	3	4	5	6	7
55.	Perturbed	1	2	3	4	5	6	7
56.	Distressed	1	2	3	4	5	6	7
57.	Troubled	1	2	3	4	5	6	7
58.	Sympathetic	1	2	3	4	5	6	7
59.	Moved	1	2	3	4	5	6	7
60.	Compassionate	1	2	3	4	5	6	7
61.	Tender	1	2	3	4	5	6	7
62.	Warm	1	2	3	4	5	6	7
63.	Softhearted	1	2	3	4	5	6	7
64.	Suspicious	1	2	3	4	5	6	7
65.	Sad	1	2	3	4	5	6	7
66.	Pleasant	1	2	3	4	5	6	7
67.	Positive	1	2	3	4	5	6	7
68.	Favorable	1	2	3	4	5	6	7
69.	Negative	1	2	3	4	5	6	7
70.	Dislike	1	2	3	4	5	6	7

1. How much blame do you place on Mike Johnson for the accident?

No Blame <----------> Total Blame
1 2 3 4 5 6 7

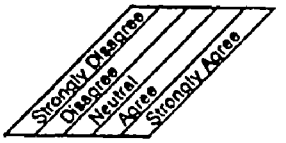
2. How much blame do you place on the product manufacturer for the accident?

No Blame <----------> Total Blame
1 2 3 4 5 6 7

3. How much do you blame the circumstances for the accident?

No Blame <----------> Total Blame
1 2 3 4 5 6 7

Please indicate how strongly you AGREE OR DISAGREE with the following statements BASED ON THE CASE you read.



4. Mike Johnson recognized the danger of using the product	1	2	3	4	5
5. The product was selected by Mike Johnson because he thought it was safe	1	2	3	4	5
6. Mike Johnson knew that the injury might occur	1	2	3	4	5
7. Mike Johnson could have purchased a safer product for the job	1	2	3	4	5
8. Mike Johnson should have known the product was dangerous	1	2	3	4	5
9. Mike Johnson took appropriate steps to avoid being injured by the product	1	2	3	4	5
10. I have experience using the product in the case	1	2	3	4	5
11. I consider myself pretty handy around the house	1	2	3	4	5
12. I use the product in the case frequently	1	2	3	4	5
13. I have a great deal of skill in using the product in the case	1	2	3	4	5
14. I normally hire someone to do basic maintenance at my house	1	2	3	4	5
15. I have experienced a similar problem with the product in the case	1	2	3	4	5

Finally, to classify individuals and compare the survey respondents to the population as a whole, we would like to ask you these last few questions. You will not be asked for your name, so your responses will be ANONYMOUS and held in STRICTEST CONFIDENCE. The information will be used only for classification purposes. Please respond by checking or filling in the blank corresponding to the appropriate response.

16. What is your sex? _____ Male ___ Female

17. What is your marital status? ___ Single ___ Married

18. How many children (under 18) are there in your household? _____

19. What is your ethnic origin? ___ Black ___ White ___ Hispanic
___Oriental ___ American Indian ___ Other

20. What is your age? _____ years old

21. What is the highest level of formal education you have completed?

___ Eight grade or less ___ Some high school ___ High school graduate

___ Trade school ___ Some college ___ College graduate

___ Some graduate school ___ Graduate degree

22. Which of the following categories best describes your occupation?

___ Homemaker	___ Educator	___ Doctor
___ Engineer	___ Business owner	___ Insurance field
___ Accountant	___ Managerial	___ Plant worker
___ Office worker	___ Salesperson	___ Government employee
___ Retired	___ Student	__ Self employed
___ Attorney	___ Other legal work	___ Other

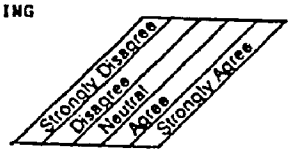
23. What was your approximate family income last year?

___ Under $10,000	___$10,000 to $19,999	___ $20,000 to $29,999
___ $30,000 to $39,999	___ $40,000 to $49,999	___ $50,000 to $59,999
___ $60,000 to $69,999	___ $70,000 to $79,999	___ $80,000 to $89,999
___ $90,000 to $99,999	___ $100,000 and above	

*** * * THANK YOU VERY MUCH FOR YOUR ASSISTANCE * * ***

APPENDIX D
SURVEY QUESTIONNAIRE

Each of the following statements represents a commonly held opinion to which there are no right or wrong answers. You will probably disagree with some items and agree with others. Please indicate how strongly you AGREE OR DISAGREE with each of the statements by CIRCLING THE APPROPRIATE RESPONSE. Circling a 1 indicates that you strongly disagree with the statement; circle a 5 if you strongly agree with a statement and so forth.



Example: I feel that I have a number of good qualities 1 2 3 (4) 5

1. Too often I try to get even, rather than forgive and forget 1 2 3 4 5
2. Social welfare programs should be our government's top priority 1 2 3 4 5
3. I am softhearted regarding the welfare of others 1 2 3 4 5

4. I believe that luck plays an important role in my life 1 2 3 4 5
5. Businesses are concerned about the welfare of society 1 2 3 4 5
6. I have considered sky diving as a hobby 1 2 3 4 5

7. I feel moved when I hear of the plight of others 1 2 3 4 5
8. Many times the penalty is too severe for the crime 1 2 3 4 5
9. Big business is strictly interested in profit 1 2 3 4 5

10. Poverty should be done away with by making basic changes in our social system . . . 1 2 3 4 5
11. I feel sympathy for people less fortunate than I 1 2 3 4 5
12. The enormous wealth of the very rich should be distributed among all people 1 2 3 4 5

13. The government should assure at least a basic standard of living for everyone . . . 1 2 3 4 5
14. I have to admit that I am sometimes jealous of other people's possessions 1 2 3 4 5
15. Politically, I would consider myself a conservative 1 2 3 4 5

16. I am resentful when others are treated better than I am 1 2 3 4 5
17. Most of us are victims of forces that we can't control 1 2 3 4 5
18. Sometimes it seems like other people get all the lucky breaks 1 2 3 4 5

19. Often I feel that I have little influence over things that happen to me 1 2 3 4 5
20. I have a warm feeling for my fellow man 1 2 3 4 5
21. I am envious when I hear of someone winning a lot of money in the lottery 1 2 3 4 5

22. Taking risks can be fun 1 2 3 4 5
23. Before I vote I thoroughly investigate the qualifications of all the candidates . . 1 2 3 4 5
24. I feel compassion for people in need 1 2 3 4 5

25. I have never intensely disliked anyone 1 2 3 4 5
26. I usually vote for the conservative candidate 1 2 3 4 5
27. On occasion I have my doubts about my ability to succeed in life 1 2 3 4 5

28. Most businesses today have the consumer's welfare in mind 1 2 3 4 5
29. My table manners when I eat at home are as good as when I eat in a restaurant . . . 1 2 3 4 5
30. Consumer welfare is the driving force behind business today 1 2 3 4 5

31. No matter who I'm talking to, I'm always a good listener 1 2 3 4 5
32. Many times we might just as well decide what to do by flipping a coin 1 2 3 4 5
33. I'm always willing to admit it when I make a mistake 1 2 3 4 5

34. I prefer friends that are unpredictable 1 2 3 4 5
35. There have been occasions when I took advantage of someone 1 2 3 4 5
36. I would like to drive a race car 1 2 3 4 5

37. I would describe myself as a "tender" person 1 2 3 4 5
38. I sometimes do things I know are dangerous just for fun 1 2 3 4 5

The following are 18 personal values. Please indicate how **IMPORTANT** each of the values is to you by **CIRCLING THE APPROPRIATE RESPONSE.**

1. A comfortable life	1	2	3	4	5
2. An exciting life	1	2	3	4	5
3. A sense of accomplishment	1	2	3	4	5
4. A world at peace	1	2	3	4	5
5. A world of beauty	1	2	3	4	5
6. Equality	1	2	3	4	5
7. Family security	1	2	3	4	5
8. Freedom	1	2	3	4	5
9. Happiness	1	2	3	4	5
10. Inner harmony	1	2	3	4	5
11. Mature love	1	2	3	4	5
12. National security	1	2	3	4	5
13. Pleasure	1	2	3	4	5
14. Salvation	1	2	3	4	5
15. Self-respect	1	2	3	4	5
16. Social recognition	1	2	3	4	5
17. True friendship	1	2	3	4	5
18. Wisdom	1	2	3	4	5

INSTRUCTIONS TO THE JUROR:

Assume that you have been chosen to serve as **A MEMBER OF A JURY** on a **PRODUCT LIABILITY CASE.** Product liability lawsuits are filed when an individual feels that an injury they received is due to an unsafe product. The following few paragraphs summarize the **FACTS OF THE CASE.** Please read the information provided carefully - as if **YOU ARE A JUROR** - then respond to the questions which follow it **AS YOU WOULD IN AN ACTUAL TRIAL.**

Mike Johnson, a twenty-two year old male, was injured when a fragment of steel from a hammer he was using hit him in the eye. Ultimately, the injury resulted in the loss of sight in his left eye. The hammer was an ordinary claw hammer with curved claws and a wooden handle. Thousands of such hammers are designed and manufactured by Ace Tool Company each year. The hammer was purchased from a local self-serve discount store. Johnson stated that advertisements claiming a "comfortable non-slip handle" were a major reason for selecting the Ace brand.

The accident, according to Mr. Johnson, occurred as follows. Johnson was driving a nail into a wall in his living room to be used as a hanger for a large picture. He struck a "foul blow," hitting the nail with the edge of the hammer. A small chip of steel flew off the edge of the hammer and struck him in the eye, resulting in the injury. Mr. Johnson was not wearing any gloves or protective eye wear at the time of the accident.

An expert witness testified that the hammer met the minimum safety standards established by the Consumer Product Safety Commission for quality of steel and hardness of the hammer head. Mr. Johnson charged that the manufacturer provided inadequate warning of the potential danger of the hammer. Warnings regarding the hammer did not mention the danger of chipping of the hammer head or the potential injury from striking the edge of the hammer, nor did it recommend that the user wear eye protection.

Mike is suing the manufacturer of the hammer for his medical expenses, pain and suffering, and punitive damages (damages intended to punish the company). The total amount Mr. Johnson is seeking for the loss of vision in his left eye is $250,000. In its defense, Ace cites the fact that thousands of people use its products without any accidents and that proper use of the product is the responsibility of the consumer. Ace feels that the injury is a result of carelessness on the part of Mr. Johnson. Therefore, while the company regrets that the injury has occurred, they feel that they are not responsible and no award is due Mr. Johnson.

RESPONSIBILITIES OF THE JUROR: As a juror, you will be asked to evaluate the facts presented during the trial. You must weigh the evidence provided and determine who was at fault. In addition, you must assess the liability of the firm and determine the award Mr. Johnson should receive. While Mr. Johnson has filed suit for $250,000, you are free to make any award that you think is reasonable. **BASED ON THE CASE** you just read, please respond to the questions on the following page by circling the appropriate response:

21. How responsible was Mike Johnson for the accident?

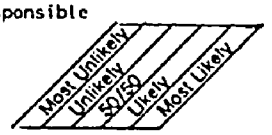
No Responsibility <----------> Completely Responsible
1 2 3 4 5 6 7

22. How responsible was the product manufacturer for the accident?

No Responsibility <----------> Completely Responsible
1 2 3 4 5 6 7

23. How responsible were the circumstances for the accident?

No Responsibility <----------> Completely Responsible
1 2 3 4 5 6 7



Please rate the likelihood that you as a juror would vote for the following damages:

24. ACQUITTAL (not guilty) of the manufacturer	1	2	3	4	5
25. Full MEDICAL SUPPORT for the injured party	1	2	3	4	5
26. Full MEDICAL SUPPORT for the injured party and PAIN and SUFFERING	1	2	3	4	5
27. Full MEDICAL SUPPORT for the injured party, PAIN and SUFFERING, and PUNITIVE DAMAGES	1	2	3	4	5

28. AS A JUROR, you would be asked to determine HOW MUCH COMPENSATION Mike Johnson should receive for his injury. While Mr. Johnson has filed his suit for $250,000, you are free to make any award that you think is reasonable. Which of the following amounts most closely corresponds to the award you think Mr. Johnson should receive?

(1) $0 (2) $50,000 (3) $125,000 (4) $250,000 (5) $375,000 (6) $500,000 (7) Maximum

Now we would like you to tell us HOW THE CASE MADE YOU FEEL. Please circle the number that best indicates how strongly you felt each of these feelings TOWARD MIKE JOHNSON.

When I think of MIKE JOHNSON, I feel:

	Did not feel this feeling at all						Felt this feeling very strongly
29. Alarmed	1	2	3	4	5	6	7
30. Grieved	1	2	3	4	5	6	7
31. Upset	1	2	3	4	5	6	7
32. Worried	1	2	3	4	5	6	7
33. Disturbed	1	2	3	4	5	6	7
34. Perturbed	1	2	3	4	5	6	7
35. Distressed	1	2	3	4	5	6	7
36. Troubled	1	2	3	4	5	6	7
37. Sympathetic	1	2	3	4	5	6	7
38. Moved	1	2	3	4	5	6	7
39. Compassionate	1	2	3	4	5	6	7
40. Tender	1	2	3	4	5	6	7
41. Warm	1	2	3	4	5	6	7
42. Softhearted	1	2	3	4	5	6	7
43. Suspicious	1	2	3	4	5	6	7
44. Sad	1	2	3	4	5	6	7
45. Pleasant	1	2	3	4	5	6	7
46. Positive	1	2	3	4	5	6	7
47. Favorable	1	2	3	4	5	6	7
48. Negative	1	2	3	4	5	6	7
49. Dislike	1	2	3	4	5	6	7

How did the case make you feel TOWARD THE MANUFACTURER.

When I think of ACE TOOL COMPANY I feel:

	Did not feel this feeling at all						Felt this feeling very strongly
50. Alarmed	1	2	3	4	5	6	7
51. Grieved	1	2	3	4	5	6	7
52. Upset	1	2	3	4	5	6	7
53. Worried	1	2	3	4	5	6	7
54. Disturbed	1	2	3	4	5	6	7
55. Perturbed	1	2	3	4	5	6	7
56. Distressed	1	2	3	4	5	6	7
57. Troubled	1	2	3	4	5	6	7
58. Sympathetic	1	2	3	4	5	6	7
59. Moved	1	2	3	4	5	6	7
60. Compassionate	1	2	3	4	5	6	7
61. Tender	1	2	3	4	5	6	7
62. Warm	1	2	3	4	5	6	7
63. Softhearted	1	2	3	4	5	6	7
64. Suspicious	1	2	3	4	5	6	7
65. Sad	1	2	3	4	5	6	7
66. Pleasant	1	2	3	4	5	6	7
67. Positive	1	2	3	4	5	6	7
68. Favorable	1	2	3	4	5	6	7
69. Negative	1	2	3	4	5	6	7
70. Dislike	1	2	3	4	5	6	7

1. How much blame do you place on Mike Johnson for the accident?

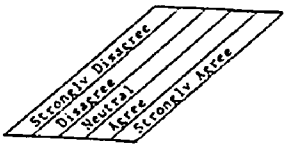
No Blame <----------> Total Blame
1 2 3 4 5 6 7

2. How much blame do you place on the product manufacturer for the accident?

No Blame <----------> Total Blame
1 2 3 4 5 6 7

3. How much do you blame the circumstances for the accident?

No Blame <----------> Total Blame
1 2 3 4 5 6 7



Please indicate how strongly you AGREE OR DISAGREE with the following statements BASED ON THE CASE you read.

4. Mike Johnson recognized the danger of using the product	1	2	3	4	5
5. The product was selected by Mike Johnson because he thought it was safe	1	2	3	4	5
6. Mike Johnson knew that the injury might occur	1	2	3	4	5
7. Mike Johnson could have purchased a safer product for the job	1	2	3	4	5
8. Mike Johnson should have known the product was dangerous	1	2	3	4	5
9. Mike Johnson took appropriate steps to avoid being injured by the product	1	2	3	4	5
10. I have experience using the product in the case	1	2	3	4	5
11. I consider myself pretty handy around the house	1	2	3	4	5
12. I use the product in the case frequently	1	2	3	4	5
13. I have a great deal of skill in using the product in the case	1	2	3	4	5

Finally, to classify individuals and compare the survey respondents to the population as a whole, we would like to ask you these last few questions. You will not be asked for your name, so your responses will be **ANONYMOUS** and held in **STRICTEST CONFIDENCE**. The information will be used only for classification purposes. Please respond by **checking or filling in the blank** corresponding to the appropriate response.

16. What is your **sex**? _____ Male ___ Female

17. What is your **marital status**? ___ Single ___ Married

18. How many **children** (under 18) are there in your household? _____

19. What is your **ethnic origin**? ___ Black ___ White ___ Hispanic
___Oriental ___ American Indian ___ Other

20. What is your age? _____ years old

21. What is the highest level of **formal education** you have completed?

___ Eight grade or less ___ Some high school ___ High school graduate

___ Trade school ___ Some college ___ College graduate

___ Some graduate school ___ Graduate degree

22. Which of the following categories best describes your **occupation**?

___ Homemaker ___ Educator ___ Doctor

___ Engineer ___ Business owner ___ Insurance field

___ Accountant ___ Managerial ___ Plant worker

___ Office worker ___ Salesperson ___ Government employee

___ Retired ___ Student ___ Self employed

___ Attorney ___ Other legal work ___ Other

23. What was your **approximate family income** last year?

___ Under $10,000 ___$10,000 to $19,999 ___ $20,000 to $29,999

___ $30,000 to $39,999 ___ $40,000 to $49,999 ___ $50,000 to $59,999

___ $60,000 to $69,999 ___ $70,000 to $79,999 ___ $80,000 to $89,999

___ $90,000 to $99,999 ___ $100,000 and above

*** * * THANK YOU VERY MUCH FOR YOUR ASSISTANCE * * ***

VITA

Mitch Griffin received his Bachelor of Science in Business Administration in June 1983 from Southern Illinois University, Edwardsville, Illinois. In June 1984, Mitch completed his Masters in Business Administration from Southern Illinois University, Edwardsville, Illinois graduating with Highest Honors.

Upon completion of his Masters in Business Administration, Mitch began his teaching and research career at Southern Illinois University, Edwardsville, Illinois. In 1986, Mitch moved to Baton Rouge, Louisiana enrolled in the Ph.D. program in Business Administration at Louisiana State University.

In August 1990, Mitch accepted the Assistant Professor position in Marketing at Bradley University, Peoria, Illinois where he teaches courses in Principles of Marketing, Sales Management, Marketing Management, and Crisis Management in Marketing.

In addition to teaching, Mitch is actively involved in research. His major area of interest lies in marketing strategy, particularly organization response to negative incidents such as product liability lawsuits, negative publicity, and consumer dissatisfaction. His publications appear in *The Journal of Business Research*, *Journal of the Academy of Marketing Science*, and *Advances in Consumer Research*. Mitch has also presented and published papers at several regional and national conferences including the American Marketing Association Summer Educators' Conference, Southern Marketing Association Annual Conference, and the Decision Science Institute Annual Conference.

DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Bryce Mitchell Griffin

Major Field: Business Administration

Title of Dissertation: Consumer Evaluation of Product-Related Injuries: The Development and Empirical Testing of a Behavioral Model of the Product Liability Process

Approved:

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

Date of Examination:

February 7, 1992